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# Childhood bullying victimization, self-labelling, and help-seeking for mental health problems

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## Abstract

**Purpose** Previous research found sustained high levels of mental health service use among adults who experienced bullying victimization during childhood. This could be due to increased psychopathology among this group, but other factors, such as self-perception as having a mental health problem, might contribute to increased service use. Additionally, the relationship between informal help-seeking for mental health problems and bullying victimization is incompletely understood.

**Methods** The present study examined associations between the frequency of bullying victimization and both formal service use and informal help-seeking for mental health problems independent from psychopathology. Data on bullying victimization, service use, informal help-seeking for mental health problems, psychopathology, and self-labelling as a person with mental illness were collected among 422 young people aged 13–22 years.

**Results** In logistic regression models, controlling for past and current psychopathology and using no bullying victimization as the reference category, we identified a greater likelihood of mental health service use among persons who experienced frequent bullying victimization, as well as a greater likelihood of seeking informal help among persons who experienced occasional victimization. Increased self-identification as a person with mental illness completely mediated the positive association between frequent bullying victimization and mental health service use.

**Conclusions** Our findings suggest that services to support persons who experienced frequent bullying victimization should focus on improving empowerment and self-perception. Additionally, there might be unserved need for formal support among those who experienced occasional bullying victimization.

**Keywords** Bullying victimisation · Mental health problems · Help-seeking · Service use · Self-labelling

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## Introduction

Childhood bullying victimization is a topic of great public health concern, given its high prevalence and persistent contribution to mental health problems [1, 2]. Recent studies have reported increased mental health service use rates during adolescence and midlife among people who experienced bullying victimization during childhood [3, 4], highlighting its persistent impact on both the individual and the health care system [1, 5]. Mental health services and social support can be important sources of help for people with mental health problems associated with bullying victimisation; but, their use is dependent on active help-seeking and thus, recognition of experienced distress as a mental health problem. In general, mental health service use increases with the severity of psychopathology [6]; however, active help seeking is also explained by non-clinical factors, such as self-recognition [7, 8]. According to Thoits [9], the identification of experienced problems as a mental illness, also called self-labelling, is a crucial first step in seeking professional support for mental health problems. In line with that, a recent longitudinal study found self-labelling to be associated with mental health service use 6 months later [10]. However, self-labelling is a double-edged sword: While it facilitates initiation of mental health service use, it is also associated with greater self-stigma, which can increase distress and hinder recovery [11]. Another common strategy to cope with mental health problems, especially when symptoms are mild, is to seek support from family and friends [12, 13]. However, informal help-seeking for mental health problems among persons who experienced bullying victimization has never been investigated.

Knowledge about mental health service use and informal help-seeking for mental health problems among persons who experienced bullying victimization is important to appropriately address their support needs. Initial evidence suggests that the experience of bullying victimization can introduce lasting changes to one's self-concept which contribute to the development of mental health problems [1, 14, 15]. Individuals who experience high duration and severity of bullying victimization tend to increasingly seek explanations for their experiences [15]. This can result in self-identifying as a victim of bullying, which is associated with self-blame, feelings of weakness, low self-worth, and ultimately impaired mental health [15–17]. Consequently, persons who self-identify as a victim of bullying might also be more inclined to interpret experienced distress as a mental illness (i.e., blame themselves), which could contribute to the observed increased rates of mental health service use.

The present paper investigates the role of self-labelling as a person with mental illness in the association between

bullying victimization and mental health service use as well as informal help-seeking for mental health problems. Additionally, as past studies suggested that the impact of bullying victimization on mental health and other outcomes can differ depending on its severity [1], we compare associations among participants who experienced no, occasional or frequent bullying victimization.

## Methods

### Design and participants

This study used data from a community sample of young people and their primary caregivers. These data were collected as part of an ongoing prospective longitudinal investigation [18, 19], that initially recruited young people aged between 9 and 12 years. For this study, we include data on youth psychopathology from 2 waves, however, data on bullying victimization, mental health service use and informal help-seeking were only assessed in the most recent wave, with participating young people being aged between 13 and 22 years. Oversampling of families from deprived, ethnically diverse inner-city areas of Greater London, UK, was used to enrich the sample with young people with genetic and symptom based risk factors for psychopathology [19]. The data presented in this study were collected from structured telephone interviews derived from a cohort of 784 caregiver-child dyads who provided consent to be re-contacted for future research. During the most recent follow up (2016–2018) which represents the wave analysed in this study, valid contact information was available for 591 families (75.4%), from which 422 (71.4%) young people agreed to participate. This sample was representative of the full original community-cohort in terms of age and gender, but over-represented young people reporting their ethnicity as “white” and those with lower total psychopathology scores. All data used in the current analyses were collected among participating young people.

Both caregivers and the young people provided written informed consent (written assent when the young person was under 16 years old), indicating agreement with these data collection and linkage procedures.

### Measures

#### Bullying victimization

Bullying victimization was assessed using eight items from the 2nd revised version of the Juvenile Victimization Questionnaire (JVQ-R2) [20]. For reliability and validity of the original scale please see [21]. Included items reflected various aspects of bullying victimization (e.g.,

“Did any young people ever tell lies or spread rumours about you, or try to make others dislike you?”), and participants responded with yes, no or maybe. Participants who answered with no or maybe for all eight items were categorized as having had no bullying victimization experiences. If respondents answered with “yes” on any item they were additionally asked about the frequency of their worst bullying victimization experience (1 time, 2 times, 3–5 times, 6–20 times, > 20 times, too many times to count). Based on those frequencies, we created two subgroups: Participants who indicated that their worst victimization experience happened between 1 and 20 times were grouped within occasional victimization experiences, and participants who reported that their worst victimization experience occurred > 20 times or too many times to count were grouped as having had frequent victimization experiences. This approach resulted in a three-level bullying victimization variable (no vs. occasional vs. frequent).

### Mental health service use

The valid and reliable Services Assessment for Children and Adolescents (SACA) was used to assess service use for mental health problems during the past 12 months [22, 23]. Participants were interviewed about service use with regards to problems they were having with their behaviour, feelings, or drugs or alcohol across a range of settings and sectors [22]. For this paper, we derived a dichotomous (yes/no) variable indicating past year service use within health (i.e., services obtained via psychiatric hospitals, psychiatric units in general hospitals, community mental health centres, or other outpatient mental health clinics, partial hospitalisation, day treatment programmes, in-home therapists, counsellors, emergency rooms, paediatricians, family doctors or health professionals such as psychologist, psychiatrist, social worker or counsellor) and/or education sectors (i.e., services obtained via special schools, special classrooms, help in the regular classroom or counselling in school).

### Informal help-seeking

Informal help-seeking was measured using additional SACA items. Participants were asked about seeking informal advice or support in relation to their mental health problems from a (1) family member, (2) partner, or (3) friend or neighbour. Responses to these questions were recorded as no, yes or don't know. These responses were combined into a dichotomous variable indicating informal help-seeking (yes vs. no): responding with no or don't know on any item was defined as not having sought informal help.

### Self-identification as having a mental illness

The 5-item self-identification as having a mental illness scale (SELF-I) assesses subjective perception of one's own identity in relation to mental illness and was used to measure the extent to which participants label themselves as a person with mental illness [24]. Reliability and validity of the scale were recently established [25, 26]. Items (e.g., “I could be the type of person that is likely to have a mental illness”) were answered on a 5-point Likert scale (1/I don't agree at all–5/I agree completely) and reverse coded when necessary so that higher SELF-I mean scores indicated higher levels of self-labelling as a person with mental illness (Cronbach's  $\alpha$  in this sample: .87).

### Psychopathology

Psychopathology in the past 6 months was assessed by the Strengths and Difficulties Questionnaire (SDQ), a dimensional measure in which higher scores indicate increasing psychopathology [27]. For reliability and validity of the original scale please see [28]. Participants rated their agreement with 20 statements (e.g., “I worry a lot”) on a three point scale (0/not true, 1/somewhat true, 2/certainly true). A total sum SDQ score reflecting current psychopathology covering emotional symptoms, conduct problems, hyperactivity and peer relationship problems was calculated. As psychopathology may not only be a consequence, but also a precursor of bullying victimisation, we used SDQ scores collected from the same individuals 3 years earlier [19, 29] to control for the influence of past psychopathology.

### Statistical analyses

Using SPSS version 21 we first compared participants who experienced none, occasional or frequent bullying victimization with regards to all included independent and dependent variables. We used one-way analysis of variance (ANOVA) with Scheffe's post hoc comparison for continuous variables and Chi-square ( $\chi^2$ ) tests including  $z$  tests with Bonferroni corrections for categorical variables. Where the assumptions for ANOVA (homoscedasticity, normally distributed residuals) were not met, we used log transformations or the Kruskal–Wallis test as a nonparametric alternative.

We examined the associations between levels of bullying victimization and mental health service use (dependent variable) using logistic regression analyses. After initially testing bullying victimization as the sole independent variable (reference category: no bullying victimization experiences), we consecutively added potential confounding variables (current and past psychopathology, age, gender) and the hypothesized mediator (SELF-I) to the model. The same procedure was repeated using informal help-seeking as the

dependent variable, as well as defining frequent bullying victimization as the reference category.

The hypothesized mediation of self-labelling as a person with mental illness in the association between bullying victimization experiences and formal service use as well as informal help-seeking was tested using structural equation modelling within R version 3.3.3 (lavaan library; Fig. 1) and controlling for current psychopathology, age and gender. As a binary outcome was modelled, diagonally weighted least squares were used as a robust alternative for the maximum likelihood estimation.

## Results

### Descriptive analyses

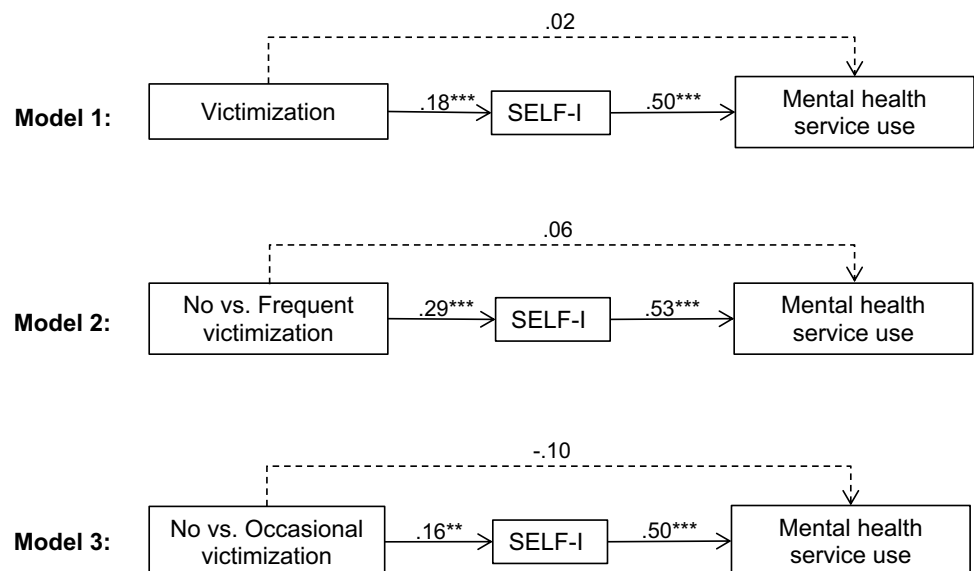
Participants were aged between 13 and 22 years and almost equally split in terms of gender. About 15% of participants reported using inpatient, outpatient and/or school services for mental health problems during the past year. Informal help-seeking for mental health problems was reported by about half of participants. Among those who had experienced frequent bullying victimization, mental health service use was significantly higher as compared to those who experienced no or occasional bullying victimization, with more than one-third utilising some type of mental health service during the past year. Participants who experienced frequent bullying victimization also reported significantly higher SELF-I and current psychopathology scores than those who experienced occasional or no bullying victimization, as well as increased informal help-seeking and higher past psychopathology scores than those who experienced no bullying victimization, but not

than those experienced occasional bullying victimization. Those who experienced occasional bullying victimization reported significantly more informal help-seeking, and higher SELF-I and current psychopathology scores than those who experienced no bullying victimization; while no significant differences between those two groups were observed regarding mental health service use and past psychopathology (Table 1).

### Likelihood of mental health service use by bullying victimization status

In an unadjusted logistic regression model on mental health service use (Table 2, Model 1) we found that experiencing frequent as compared to no bullying victimization was significantly associated with a greater likelihood of using mental health services. When controlling for current and past psychopathology, age and gender (Table 2, Models 2–3) the odds of mental health service use were reduced but remained significant. However, when the SELF-I was included (Table 2, Model 4), experiencing frequent as compared to no bullying victimization was no longer significantly associated with greater likelihood of mental health service use. We observed no significant differences in the likelihood of using mental health services when comparing those who experienced occasional vs. no bullying victimization (Table 2, Models 1–4). Using frequent bullying victimization as the reference category, experiencing occasional bullying victimization was associated with significantly lower likelihood of mental health service use after controlling for current and past psychopathology, age and gender (data not shown; OR = 0.36,  $p < 0.05$ , 95% CI 0.17–0.80; significance diminished after adding SELF-I to the model).

**Fig. 1** Path models of the association between victimization and mental health service use mediated by SELF-I; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ ; all path models were controlled for current psychopathology, age, and gender



**Table 1** Participant characteristics overall and by bullying victimization status

	Total (n=422)	Frequency of experienced bullying victimization			p value
		None (n=190)	Occasional (n=177)	Frequent (n=55)	
Mental health service use					< 0.001
No	356 (84.4%)	169 (88.9%)	153 (86.4%)	34 (61.8%)	
Yes	66 (15.6%)	21 (11.1%)	24 (13.6%)	21 (38.2%)	
Informal help-seeking					< 0.001
No	229 (52.1%)	129 (67.9%)	75 (44.4%)	25 (45.5%)	
Yes	191 (47.4%)	61 (32.1%)	101 (57.1%)	29 (52.7%)	
Missing	2	–	1	1	
SELF-I	M=2.35, SD=0.81	M=2.08, SD=0.61	M=2.45, SD=0.79	M=2.93, SD=1.05	< 0.001
Current psychopathology	M=9.40, SD=4.70	M=7.87, SD=3.99	M=10.08, SD=4.43	M=12.42, SD=5.99	< 0.001
Past psychopathology	M=11.56, SD=5.55	M=11.07, SD=5.43	M=11.54, SD=5.35	M=13.33, SD=6.29	0.06
Age	M=18.70, SD=1.46	M=18.62, SD=1.48	M=18.79, SD=1.48	M=18.64, SD=1.35	0.26
Gender					< 0.05
Male	181 (42.9%)	93 (48.9%)	72 (40.7%)	16 (29.1%)	
Female	241 (57.1%)	97 (51.1%)	105 (59.3%)	39 (70.9%)	

**Table 2** Likelihood of mental health service use by bullying victimization status, logistic regression analyses

	Model 1			Model 2			Model 3			Model 4		
	OR	p	95% CI	OR	p	95% CI	OR	p	95% CI	OR	p	95% CI
Occasional victimization <sup>a</sup>	1.26	0.46	0.68–2.36	0.95	0.87	0.49–1.82	0.91	0.79	0.47–1.77	0.56	0.12	0.27–1.17
Frequent victimization <sup>a</sup>	4.94	< 0.001	2.43–10.03	2.95	< 0.01	1.36–6.38	2.75	0.01	1.25–6.04	1.43	0.45	0.57–3.55
Current psychopathology				1.13	< 0.001	1.07–1.21	1.14	< 0.001	1.07–1.21	1.05	0.20	0.98–1.13
Past psychopathology				1.00	0.99	0.95–1.05	1.00	0.96	0.95–1.05	1.03	0.39	0.97–1.09
Age							1.02	0.84	0.83–1.25	0.94	0.62	0.75–1.19
Gender (female) <sup>b</sup>							1.32	0.35	0.74–2.38	1.03	0.94	0.53–1.98
SELF-I										4.48	< 0.001	2.89–6.92

<sup>a</sup>Reference category: no bullying victimization experiences

<sup>b</sup>Reference category: male

**Table 3** Likelihood of informal help-seeking for mental health problems by bullying victimization status, logistic regression analyses

	Model 1			Model 2			Model 3			Model 4		
	OR	p	95% CI	OR	p	95% CI	OR	p	95% CI	OR	p	95% CI
Occasional victimization <sup>a</sup>	2.83	< 0.001	1.84 – 4.33	2.53	< 0.001	1.63–3.92	2.39	< 0.001	1.53–3.73	2.14	< 0.01	1.35–3.37
Frequent victimization <sup>a</sup>	2.43	< 0.01	1.32 – 4.51	1.99	< 0.05	1.04–3.83	1.77	0.09	0.91–3.44	1.30	0.46	0.65–2.62
Current psychopathology				1.07	< 0.05	1.02–1.12	1.07	< 0.01	1.02–1.13	1.04	0.18	.98–1.09
Past psychopathology				0.97	0.11	0.93–1.01	0.97	0.14	0.94–1.01	0.98	0.22	0.94–1.01
Age							1.07	0.33	0.93–1.24	1.05	0.48	0.91–1.22
Gender (female) <sup>b</sup>							1.69	< 0.05	1.12–2.55	1.52	0.06	1.00–2.33
SELF-I										1.89	< 0.001	1.39–2.58

<sup>a</sup>Reference category: no bullying victimization experiences

<sup>b</sup>Reference category: male



## Likelihood of informal help-seeking by bullying victimization status

In an uncontrolled logistic regression model (Table 3, Model 1) using no bullying victimization as the reference category, both occasional and frequent bullying victimization were significantly associated with higher likelihood of seeking informal help for mental health problems. After controlling for current and past psychopathology, age and gender, experiencing frequent as compared to no bullying victimization was no longer significantly associated with greater odds of informal help-seeking (Table 3, Models 2–4). Experiencing occasional as compared to no bullying victimization remained significantly associated with increased informal help-seeking, even after controlling for confounding (Table 3, Models 2–4). We observed no significant differences in the likelihood of seeking informal help for mental health problems when comparing those who experienced occasional with those who experienced frequent bullying victimization (data not shown; OR = 0.78,  $p = 0.46$ , 95% CI 0.38–1.54). As those findings do not point towards a mediation effect of SELF-I scores, the SELF-I was not tested as a mediator in the association between bullying victimization and informal help-seeking for mental health problems.

### SELF-I as a mediator of the association between bullying victimization and mental health service use

All reported path models were controlled for current psychopathology, age and gender. As saturated models ( $df = 0$ ) were estimated, model fit was not evaluated. Including bullying victimization as an ordinal predictor (Fig. 1, Model 1), the association between bullying victimization and mental health service use was completely mediated by the SELF-I (indirect effect 0.10,  $p \leq 0.001$ ; direct effect .04,  $p = 0.54$ ).

In a next step we repeated the mediation model on mental health service use only including people who experienced no or frequent bullying victimization or only including people who experienced no or occasional bullying victimization (Fig. 1, Models 2–3). This was done to allow a better understanding of how different levels of bullying victimization relate to the SELF-I and mental health service use. Based on the findings from the logistic regression analyses, we hypothesized that people who experienced frequent bullying victimization would be more inclined to identify as having a mental illness and, therefore, seek more mental health services. Accordingly, compared to those who experienced no bullying victimization, participants who experienced frequent bullying victimization were significantly more likely to use mental health services, and this relationship was completely mediated by the SELF-I (Model 2, indirect effect = 0.15,  $p < 0.001$ ; direct effect = 0.06,  $p = 0.38$ ).

Those who experienced no bullying victimization did not differ from participants who experienced occasional bullying victimization with regards to mental health service use: Similar to frequent bullying victimization experiences, occasional bullying victimization experiences were associated with increased SELF-I which in turn led to increased mental health service use; however, we observed a negative direct association of similar magnitude between occasional bullying victimization experiences and service use that explains the overall non-significance observed in the previous regression analysis (Model 3, indirect effect = 0.08,  $p < 0.05$ ; direct effect = - 0.10,  $p = 0.27$ ).

## Discussion

We found a positive association between frequent bullying victimization and mental health service use, which existed independent from current and past psychopathology. Self-labelling as a person with mental illness completely mediated this relationship. Interestingly, occasional bullying victimization was not associated with increased mental health service use, but instead positively associated with informal help-seeking.

Previous research on patterns of support seeking for mental health problems [30, 31] suggests that informal help-seeking is increased when low or mild symptoms are experienced but will decrease when symptoms worsen, while mental health service use steadily increases with symptom severity. Our findings suggest that bullying victimization results in a similar support seeking pattern. Independent from current and past psychopathology, persons who experienced occasional bullying victimization sought more informal help, but did not use more mental health services than those who did not experience bullying victimization. Those who experienced frequent bullying victimization used more mental health services but did not seek more informal help than those who experienced no bullying victimization. Usually, young people prefer informal support over using mental health services and reject the label of mental illness [7]. Our findings suggest that frequent bullying victimization experiences might reduce their hesitation to use mental health services because of their increased self-labelling as having a mental illness, a well-known facilitator of mental health service use [9, 10, 32]. Additionally, it may be that despite a preference to seek support from informal sources, young people who experienced frequent bullying victimization lack trusted confidants to seek help from [2].

Past research supports our conclusion that frequent bullying victimization experiences lead to increased mental health service use by increasing self-labelling as having a mental illness. According to Social Information Processing Theory, victimization that is experienced as traumatic

and uncontrollable can introduce changes in how one evaluates and responds to future stressful events, based on changes in one's self-perception (e.g., identification as a victim of bullying) [15, 16, 33]. In our study, frequent bullying victimization was associated with greater self-labelling as a person with mental illness, which could be due to greater self-identification as a victim of bullying and the associated tendency to self-blame. Individuals who experienced occasional bullying victimization might be able to better cope with their experiences and, therefore, less likely to identify as a victim of bullying, potentially due to greater levels of social support. Nevertheless, it is important to note that while occasional bullying experiences were not associated with increased mental health service use; there might still be a need for professional support among this group.

Our findings have several limitations. The analysed data were cross-sectional and causality could not be established. We addressed this limitation by controlling the regression models for past psychopathology, which was not associated with mental health service use or informal help-seeking. We had no data on whether bullying victimization was experienced solely in the past or was still ongoing. Persons who responded with "maybe" when asked about their bullying experiences were conservatively added to the "no bullying experiences" group, potentially leading to an underestimation of group differences. Cut-offs for categorizing bullying victimization frequency were arbitrary and chosen merely based on theoretical considerations. However, results did not differ when other cut-offs were chosen (i.e., no vs. 1 to > 20 times vs. too many times to count). Whether self-identification as a person with mental illness also contributes to service use decades after initial bullying victimization was experienced is a topic for future research.

Self-labelling as a person with mental illness is an important facilitator of help-seeking for mental health problems. Our results suggest that increased self-identification as having a mental health problem among individuals who experienced frequent bullying victimization may facilitate mental health service use among this vulnerable group. Self-labelling, however, can also lead to self-stigma, which is associated with feelings of shame and hopelessness [11]. Self-labelling might, therefore, introduce additional distress and further reduce empowerment, in particular, among young people who experienced bullying victimization. Mental health care providers need to be aware of the need for building self-efficacy and supporting positive self-perceptions among this group in addition to treating their mental health problems. Additionally, young people who experienced occasional bullying victimization might have unserved need for formal support.

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## Compliance with ethical standards

**Conflict of interest** The authors declare that they have no competing interest.

**Ethical approval** The King's College London and London School of Economics and Political Science Research Ethics Committees provided ethical approval for this study.

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