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Invited Review



Prevalence of violence against children in the United Kingdom: A systematic review and meta-analysis

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ABSTRACT

Background: Violence against children can have extensive, long-term, and far-reaching adverse impacts on survivors and society. There is currently little consensus in the United Kingdom around the prevalence of violence against children: maltreatment, intimate partner violence, sexual violence, bullying, and community violence, and most existing studies focus on only a single or a few forms of violence. This study aims to produce data to highlight the current magnitude of the problem in the UK, to inform policy, drive action and allow for monitoring of progress over time.

Objective: To produce weighted prevalence estimates by violence type, as well as gender and age sub-categories, to give as full a picture as possible of the current prevalence of violence against children in the UK.

Participants and setting: The prevalence of violence against children from 23 self-report studies conducted in the United Kingdom was gathered through a systematic review.

Methods: Databases were searched from inception to 24th June 2022. Studies were reviewed systematically for appropriate data and meta-analyses were conducted to give pooled prevalence data based on a quality effects model.

Results: The most prevalent self-reported experience of childhood violence was community violence at 27.33 % (95 % CI [9.84, 48.97]). Prevalence of bullying was also high at 22.75 % (95 % CI [13.25, 33.86]). The most prevalent forms of child maltreatment were domestic violence exposure at 11.9 % (95 % CI [6.34, 18.84]) and emotional maltreatment at 11.84 % (95 % CI [5.58, 19.89]).

Conclusion: National child maltreatment surveys are needed in the UK, using a comprehensive and conceptually robust approach, and valid and reliable instruments, to provide data for researchers and policymakers on the prevalence of all types of violence against children including exposure to multiple types. This allows monitoring of trends over time, can inform strategies for prevention, and can enable monitoring of future progress in reducing violence against children and its associated health and economic burden.

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1. Introduction

Prevalence of violence. Violence against children can have lifelong adverse impacts on the health and wellbeing of children and on the stability of communities with high social and economic costs (World Health Organisation, 2022). Its prevention is a clearly defined global policy priority (United Nations General Assembly, 2015), yet there is currently little data in the United Kingdom (UK) on the prevalence of violence against children, and this study aims to address this gap in the literature. As recognised by the World Health Organisation (WHO), categories of violence include interpersonal, self-directed, and collective violence. This study focuses specifically on interpersonal violent acts against those below the age of eighteen years (World Health Organisation, 2022). This includes family violence such as all forms of child maltreatment inflicted by a parent or caregiver in the home (physical abuse, emotional abuse, sexual abuse, neglect, and exposure to domestic violence), intimate partner (or dating) violence in childhood and adolescence, as well as community violence, which occurs among individuals who are not connected as family members such as peers, acquaintances, or strangers (see Fig. 1, supplementary appendix 1). There is often ambiguity in the literature around the definition of various types of violence, including the different types of child maltreatment, and this is sometimes influenced by the particular social system involved and its area of legislative responsibility and power. Sexual abuse, for example, is generally considered by child protection systems to be limited to sexual violence towards a child by a parent or adult caregiver in the home; in contrast, comprehensive epidemiological studies (e.g., Finkelhor et al., 2014; Mathews et al., 2023) and theoretical analysis (Mathews & Collin-Vézina, 2019), considers child sexual abuse to include sexual acts by either caregivers, other adults (whether known or unknown), or other adolescents or children (Mathews & Collin-Vézina, 2019). For this analysis, we have measured sexual abuse as a form of maltreatment inflicted by parents or caregivers, and sexual violence as inflicted in the community by anyone other than parents, caregivers, or intimate partners, to align with the approaches to other maltreatment types and the definitions used in our included studies. Both child sexual abuse and sexual violence include any forms of sexual assault, rape, or exploitation, and can be contact or non-contact. Similarly, whilst bullying and sexual violence both occur in the community, for this analysis community violence refers to other community violence such as knife crime or assault with or without a weapon, and separate estimates are presented for bullying and sexual violence, as per approaches used in the included studies (see Fig. 1, supplementary appendix 1).

Gaps in existing data. Despite being recognised as a global public health concern with the UN Agenda for Sustainable Development aiming to end all forms of violence against children (United Nations General Assembly, 2015), there is currently little consensus among researchers as to the national prevalence in the United Kingdom of violence against children, or whether the problem is increasing or declining (Hillis et al., 2016; Radford et al., 2013). Government data appear to suggest an upward trend, with the number of child protection plans in place in 2013 at 43,190, compared with those in 2022 at 50,920 (Gov.uk, 2022). The likelihood is that the COVID-19 pandemic, and the response to it in the form of lockdowns will have exacerbated this problem significantly and will likely have long lasting negative impacts (Kovler et al., 2021). Great Ormond Street hospital recorded 10 cases of suspected abuse-related head trauma in children in one month during the first lockdown, compared with an average 0.67 such cases at the same time point over the previous three years (Sidpra et al., 2021). The Crime Survey for England and Wales (CSEW) estimates that one in five people aged 18 to 74 years have suffered at least one form of child maltreatment before the age of 16, and the ONS reports that the pandemic made teenagers more vulnerable to knife crime in the community, with rates in 2021/22 the highest for 76 years (Office for National Statistics ONS). However, both sources of data are dramatic underestimates of true prevalence as they rely on both presentation of cases to these systems, and official recording of proven cases after administrative processes which are not intrinsically designed or equipped to capture the truth of lived experience. In contrast, self-report data points to substantially higher prevalence rates of violence against children; around 80 % or higher (Office for National Statistics, 2020a). As these more reliable figures indicate, violence against children is often a hidden problem, and research around the world has suggested the self-reported prevalence of child sexual maltreatment may be up to 30 times higher than official reports, and physical abuse up to 75 times higher (Hillis et al., 2016; Stoltenborgh et al., 2011). One of very few child maltreatment prevalence studies in the UK used self-report data and found rates of maltreatment were 7 to 17 times greater than official statistics (Radford et al., 2013). Similarly, Gilbert et al. (2012) estimated that only one in thirty cases of child maltreatment is recognised in government statistics (Gilbert et al., 2012).

The extent of the gap between official records of violence and actual violence prevalence is currently difficult to assess. Poorly designed studies are likely to underestimate prevalence, and even well-designed studies rely on children's willingness to disclose difficult information. Additionally, studies that use adult retrospective reports rely on accurate recall, and will likely underestimate prevalence since participants cannot always recall early childhood events. Without comprehensive prevalence data, there will remain gaps in scientific understanding which also compromise the ability for policy-makers and practitioners to respond to significant levels of need in the population among children and adolescents who are exposed to violence in any of its forms.

Impacts of violence in childhood. A review of national prevalence studies found most nations lack reliable data of all the recognised forms of violence against children, allowing for very little investigation of child maltreatment in the context of other adversities or victimisations, and that almost all have produced no follow-up data to examine trends over time (Mathews et al., 2020). Many studies to-date have focussed either on a single type of child maltreatment or violence against children, or only a few forms, despite evidence to suggest that experience of one form of victimisation in childhood can be a strong predictor of further abuse types, both at home, in school and in the community (Finkelhor, Ormrod, et al., 2009). A UK review found children who had been abused by a parent or caregiver were more likely than those who had not been abused at home to have future experience of other forms of victimisation, and to have higher trauma levels as a result (Radford et al., 2013). Figures reported by the Office for National Statistics (ONS) suggest that 52 % of adults who experienced child maltreatment will go on to experience domestic violence in adulthood, compared with 13 % of those with no abuse history (Office for National Statistics, 2020a). Similarly, ONS analysis of CSEW statistics reported that of those who

suffered abuse as a child, 31 % went on to report sexual violence victimisation in adulthood, compared with 7 % of those with no abuse history in childhood (Office for National Statistics, 2017).

A recent nationally representative study in Australia found increased rates of health risk behaviours associated with experience of all the five types of child maltreatment, with higher rates of risk associated with sexual abuse and emotional abuse (Lawrence et al., 2023). Emotional and sexual abuse were shown to carry the greatest odds of future health risk behaviour, and the most prevalent associated outcomes of maltreatment were cannabis dependence, self-harm, and suicide attempts (Lawrence et al., 2023). Mental health disorders were also shown to be associated with child maltreatment, again with sexual abuse and emotional abuse most strongly associated (Scott et al., 2023). Increased health service utilisation was also strongly associated with exposure to maltreatment (Pacella et al., 2023). Violence in childhood can have long-term consequences through direct and indirect pathways, by the risk of immediate physical injury, psychological disorders, and chronic stress, and then the adoption of coping strategies such as smoking and drug use which add further risk to future health (Lawrence et al., 2023; Nelson et al., 2020). There is now growing evidence to suggest violence in childhood can impact brain development and produce epigenetic changes, which when combined with mediators such as psychological distress and health risk behaviours, can result in lower educational attainment, poor health outcomes and therefore impact economic and disease burden (Cicchetti et al., 2016; Nelson et al., 2020).

Research objectives. Greater understanding of the related and cumulative consequences of violence victimisation for young peoples' outcomes could be vital in early identification of those at risk, and in the development of impactful prevention strategies. Since many children may experience violence in any of its forms, the prevalence of all the recognised forms of violence against children should ideally be considered at once, along with specific features such as age and gender and relationship to abuser, which provides information on specific risk profiles (Finkelhor, Ormrod, et al., 2009; Radford et al., 2013).

To inform policy, drive action, and effectively monitor progress against Target 16.2 aiming to end all forms of violence against children (United Nations General Assembly, 2015), it is necessary to first determine the current magnitude of the problem in the UK. This study aims to generate reliable, weighted prevalence data on all forms of violence against children in the UK for the first time, with the goal of filling this gap in the literature, and allowing for further developments in this area. We conducted a systematic review of the scientific literature and quantitative meta-analyses synthesizing the best available evidence on the prevalence in the UK of child maltreatment; intimate partner or dating violence; sexual violence by acquaintances, peers, and strangers; bullying by peers in the community and at school and other community violence. Our aim was to produce weighted prevalence data by violence type, as well as gender and age categories, to give as full a picture as possible of the current prevalence of violence against children in the UK with reference to the co-occurrence of violence types. To the best of our knowledge, this is the first meta-analysis to summarise the prevalence of violence against children in the UK.

2. Methods

This study was guided by the 2020 PRISMA statement (Page et al., 2021) for reporting systematic reviews and meta-analyses (Supplementary Appendix 2). A review protocol was developed to identify search methods and inclusion criteria in advance and registered at PROSPERO (Nation et al., 2023) #CRD42022331793, (https://www.crd.york.ac.uk/PROSPERO). Our search strategy is presented in supplementary appendix 3.

2.1. Inclusion and exclusion criteria

This systematic review and meta-analysis included studies that met the following inclusion criteria: (1) primary empirical studies of the prevalence of violence against children with childhood defined as under 18 years: a) child maltreatment: (i) physical abuse; (ii) emotional or psychological abuse; (iii) neglect; (iv) sexual abuse; (v) exposure to domestic violence; b) intimate partner or dating violence; c) sexual violence by acquaintances, peers and strangers; d) bullying by peers in the community and at school and e) other community violence; (2) studies conducted nationwide using a representative sample of the population or regional studies; (3) studies involving adult or child participants providing self-reported information about their experience, or studies where adults (caregiver or teacher) provided information about a child's experience; (4) peer-reviewed studies or substantial grey literature; (5) the study was conducted in the United Kingdom (Supplementary appendix 3).

This review included population-based surveys, probabilistically drawn, using national/subnational samples in the UK with data collected by interviewer-administered household surveys, school surveys, online or Computer Assisted Telephone Interviewing (CATI) sampling procedures. Studies using self-report by child or adult proxy (teacher, parent/or caregiver) and adult retrospective self-report of violence in childhood were included. Population-based surveys on prevalence of ever (adult respondents) and past-year (child respondents) experience of violence against children were also included.

On the few occasions where the same data were reported across different publications, the most informative publication was selected. Scholarly reviews, letters, comments, news, and conference abstracts were all excluded.

2.2. Search strategy

The following databases were searched for published peer reviewed studies from academic journals on the prevalence of violence against children in the UK within EBSCOhost: Medline, PsycINFO, Education Research Complete, CINAHL, Academic Search Premier and Psychology and Behavioural Sciences Collection, using the search terms: bullying or cyberbullying or maltreatment or physical violence or sexual violence or emotional abuse or neglect or domestic violence or community violence or exploitation or youth

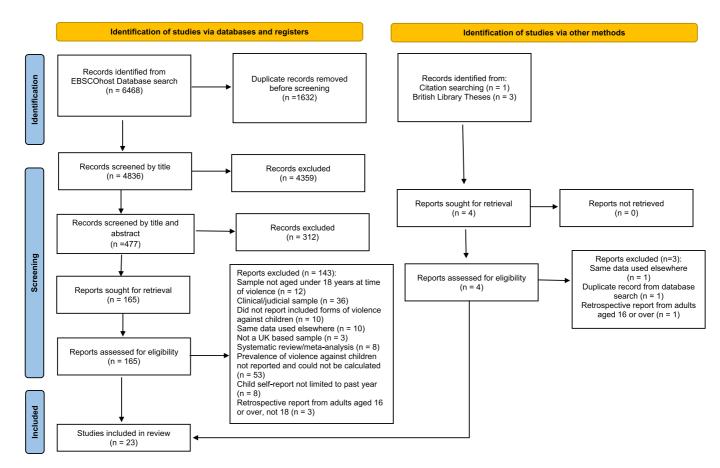


Fig. 2. PRISMA flow diagram showing process of study selection for inclusion in systematic review and meta-analyses.

Table 1Study characteristics of included studies.

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Citation	Types of violence measured	Instrument used to measure prevalence	Boys	Girls	Participant age	Setting	Urban/ rural	Study design	Sampling frame	Sampling strategy	Response rate (%)	Survey method	Quality score
Bellis 2014	SV, PM, EM, EDV	Centres for Disease Control and Prevention short ACE tool	584	882	18–70 years	UK	Both	Cross- sectional	Adults in UK 18–70 years	Random probability sampling	70.40	FF or SPQ	0.8
Bellis 2015	SV, PM, EM, EDV	Centres for Disease Control and Prevention short ACE tool	1749	2136	18–69 years	England	Both	Cross- sectional	Adults in England 18–69 years	Random probability sampling	59.60	SPQ or FF CAPI	0.7
Bevilacqua 2017	B, CB	Gatehouse bullying scale (GBS); two items from DAPHNE II questionnaire for cyberbullying	3133	3534	11–12 years	Southeast England	Both	Cluster randomised control trial	Secondary school students at the end of year 7	Purposive sampling	96	SPQ under supervision of research team	0.8
Brewer 2015	CB	Revised cyberbullying inventory (RCBI)	39	51	16–18 years	Northwest England	Not stated	Cross- sectional	Students aged 16–18 years attending further education colleges	Purposive sampling	Not stated	CASI	0.5
Chaplin 2021	PM, SV	Childhood Trauma Screener	67,733	87,490	40–69 years at baseline	UK	Both	Population based prospective study	UK BIOBANK participants who answered questions on physical and sexual childhood abuse	Random probability sampling	Not stated	CASI	0.7
Charak 2020	EM, N, EDV, CV, SV	Adverse Childhood Experiences questionnaire (ACE) and modified LEC-5	332	719	Adults over 18 years	UK	Both	Cross- sectional	Sample of the UK population drawn from existing online research panel	Random probability sampling	Not stated	CASI	0.8
Chester 2017	В	Revised Olweus Bully/victim questionnaire	2748	2587	11–15 years	England	Both	Cross- sectional	School students aged 11–15 years	Cluster sampling	92 % student response rate	SPQ, at school	1.0
Coid 2020	SM, PM, N, EDV	Not stated	Male	N/A	18–34 years	England, Scotland, and Wales	Both	Cross- sectional	Boys aged 18–34 years	Random location sampling	Not stated	SPQ	0.5
Denholm 2013	SM, PM, N, EDV	Parental Bonding Instrument; British National Survey of Health and Development; US National	4665	4712	44–45 years	England, Scotland, and Wales	Both	Cross- sectional	Individuals born in one week in March 1958	Random probability sampling	Not stated	SPQ	0.8

Table 1 (continued)

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Citation	Types of violence measured	Instrument used to measure prevalence	Boys	Girls	Participant age	Setting	Urban/ rural	Study design	Sampling frame	Sampling strategy	Response rate (%)	Survey method	Quality score
Houtepen 2020	PM, SM, EM, N, EDV, B	Comorbidity Survey Data derived from ACE measures fitting current study definitions in ALSPAC study	5029	4930	0–22 years	Southwest England	Both	Cross- sectional	Pregnant women in an area of UK with due dates 1st April 1991 to 31st December 1992	Random probability sampling	Not stated	SPQ proxy respondent 0–8 years, SPQ 8–18 years, retrospective SPQ aged 22 years	0.6
Ireland 2015	SV	Checklist to assess sexual exploitation	54	144	18–22 years	UK	Not stated	Cross- sectional	Students on a university campus	Random probability sampling	45	SPQ	0.5
Jackson 2016	CV, B, DV, SV	Juvenile victimisation questionnaire (JVQ)	259	471	13–16 years	Warwickshire	Both	Cross- sectional	School children aged 13–16 years	Purposive sampling	75	SPQ, at school	0.6
May- Chahal 2005	B, PM, EM, SM, N	Questionnaire developed for study	1234	1635	18–24 years	UK	Both	Cross- sectional	Postcode address file, households with resident aged 18–24 years	Random probability sampling	69	FF interview or CAPI	0.9
McGavock 2017	EM, PM, SM, N, B, CV	The Big Ask online survey, ACE questionnaire	212	552	18 years and over	Belfast	Urban	Cross- sectional	1st year undergraduate students	Purposive sampling	18.6	CASI	0.5
Oaksford, 2001	SV	Developed for study		Female	18–41 years	Cardiff	Urban	Cross- sectional	1st & 2nd year psychology students	Purposive sampling	72	SPQ	0.5
Pui Kei Leung 2016	PM, EDV	Whitehall II study	5473	2397	45–80 years	London	Urban	Cross- sectional	Civil servants working in Whitehall, 35–55 years	Purposive sampling	Not stated	Clinic sessions, SPQ	0.5
Purdy 2016	СВ	Developed for study	201	224	13–18 years	Northern Ireland	Both	Cross- sectional	Children in years 9, 11 and 13 in two secondary schools	Purposive sampling	59	SPQ	0.6
Radford 2013	PM, EM, SM, N, EDV, B, CB, CV, DV, SV	Juvenile Victimisation Questionnaire (JVQ)	2996	3200	2 months – 10 years parent/ caregiver proxy; 11 years – 24 years self- report	UK	Both	Cross- sectional	Children in UK under 25 years	Random probability sampling	60.40	CASI	0.9
Smith 2000	В	Olweus bully/ victim Questionnaire (adapted)	1238	1070	10–14 years	England	Both	Cross- sectional	Pupils aged 10–14 years from a sample of 19 schools in England	Purposive sampling	Not stated	SPQ, at school	0.6

CASI – computer assisted self-interview. CAPI – computer assisted personal interview. FF – face to face. SPQ – self-completed paper questionnaire. B – bullying. CB – cyberbullying. SV – sexual violence. DV – dating violence. EDV – exposure to domestic violence. CV – community violence. EM – emotional maltreatment. PM – physical maltreatment. SM – sexual maltreatment. N – neglect.

violence or intimate partner violence or dating violence or psychological abuse or abuse AND child* or adolescen* or teen* or youth or young people or school student* or kid AND UK or United Kingdom or Britain or England or Wales or Scotland or Northern Ireland.

OpenGrey was searched for grey literature, in case of any relevant data that had been produced by recognised organisations, though none was found that met inclusion criteria for this study. The full search strategy and terms used are presented in the review protocol (supplementary appendix 3).

To ensure we identified all relevant studies, databases were searched from inception to 24th June 2022 with no restrictions for language or any other means. Additionally, government and voluntary sector websites, and theses held by the British Library were surveyed. The reference lists of all included articles were also reviewed for any additional studies to include.

2.3. Screening and data extraction

After initial screening of the title and abstract, articles deemed relevant were retrieved for examination. As detailed in the search strategy (Supplementary appendix 3), one reviewer initially screened records by title and abstract, and those deemed relevant were retrieved for examination. Duplicates were identified and removed using electronic software (Endnote), along with any studies using the same data, where the publication providing the most detailed account was retained. The same reviewer then independently retrieved and reviewed the remaining full articles to see if they met the study's inclusion criteria. The reference lists of all included studies were then screened to identify any further potentially eligible studies. A second reviewer then checked the selected studies met the eligibility criteria.

One reviewer (AN) extracted data of included studies into an MS Excel spreadsheet, and a second reviewer (RP) checked the extracted data. Data extraction sheets were pilot tested and revised to include citation, period studied, types of violence measured, instrument used to measure prevalence, exposure definition, participant information (gender/age) and setting, urban or rural location, study design, sampling frame, sampling strategy, sample size, response rate, recruitment and how survey was administered, prevalence of each type of violence, relationship to perpetrator (Supplementary Appendix 4).

2.4. Risk of bias

We adapted the Hoy et al. (2012) checklist for assessing risk of bias in prevalence studies (Hoy et al., 2012) and created an overall risk of bias score for each study which summed scores for individual items and a proportional score was calculated by dividing the total quality score by the maximum possible score (Jadambaa et al., 2019; Mathews et al., 2020). The quality of each study was assessed by considering four external validity items and five internal validity items, with possible scores ranging from 0 to 11. The quality assessment for each study is presented in Supplementary Appendix 5.

2.5. Statistical analysis

This study provides a synthesis of the findings from included studies by violence type. Prevalence estimates extracted from each study can be found in supplementary appendix 4. An established meta-analytic method was then followed using Meta-XL version 5.3 (plugin software for Microsoft Excel) (Barendregt et al., 2013) to pool prevalence data based on a quality-effects model (Doi & Thalib, 2008), which allows greater weight to be given to studies rated as higher quality based on the quality assessment (Jadambaa et al., 2019; Norman et al., 2012). Heterogeneity was assessed using Cochran's Q and I² statistics. Pooled prevalence is presented for all included studies by violence type. We also included a set of pre-specified subgroup analyses to explore the effects of important study characteristics on heterogeneity (depending on data availability) including gender, and age of participants in the sample (under 18 years or 18 years and older). Forest plots were generated to show individual and pooled effects.

3. Results

Of the 165 studies assessed for eligibility, 22 met the pre-determined study inclusion criteria. Another four records were identified from abstract search of included studies and search of theses in the British library, of which one met the inclusion criteria, giving a total 23 articles included in this study (Fig. 2 PRISMA flow diagram). Six of the studies were across the UK (Bellis et al., 2014; Chaplin et al., 2021; Charak et al., 2020; Ireland et al., 2015; May-Chahal & Cawson, 2005; Radford et al., 2013), twelve studies were conducted in England (Bellis et al., 2015; Bevilacqua et al., 2017; Brewer & Kerslake, 2015; Chester et al., 2017; Houtepen et al., 2020; Jackson et al., 2016; Leung et al., 2016; Smith et al., 2008; Smith & Shu, 2000; Stonard, 2021; Wolke et al., 2012), two were conducted across England, Scotland, and Wales (Coid et al., 2020; Denholm et al., 2013), two were conducted in Northern Ireland (McGavock & Spratt, 2017; Purdy & York, 2016), and one was conducted in Wales (Oaksford, 2001) (Table 1).

Only one study measured all types of violence against children (maltreatment, sexual violence, intimate partner/dating violence, bullying, community violence) (Radford et al., 2013), and one study measured four of the five types (all except child maltreatment) (Jackson et al., 2016). Two studies measured three types of violence (Charak et al., 2020; McGavock & Spratt, 2017), and all the other studies measured one or two types. For those studies measuring child maltreatment, only three measured all five maltreatment types included in this study (Denholm et al., 2013; Houtepen et al., 2020; Radford et al., 2013). The largest number of data points were available for child physical abuse, bullying and sexual violence. Fourteen studies measured lifetime prevalence of violence in child-hood, defined in this study as before the age of 18, seven studies measured past year violence experience and two measured both lifetime and past year experience.

Eleven studies involved adults providing self-report data (ranging from 18 to 22 years old to 18–70 year olds, and 18 years or over) (Bellis et al., 2014, 2015; Chaplin et al., 2021; Charak et al., 2020; Coid et al., 2020; Denholm et al., 2013; Ireland et al., 2015; Leung et al., 2016; May-Chahal & Cawson, 2005; McGavock & Spratt, 2017; Oaksford, 2001), ten studies involved only child participants giving self-report data, aged 11–12 years, 16–18 years, 11–15 years, 13–16 years, 13–18 years, 11–16 years, 12–18 years and 8–10 years respectively (Bevilacqua et al., 2017; Brewer & Kerslake, 2015; Chester et al., 2017; Jackson et al., 2016; Purdy & York, 2016; Smith et al., 2008; Smith & Shu, 2000; Stonard, 2021; Wolke et al., 2012), and two studies provided a combination of proxy reports by adults regarding young children's violence experience as well as children's self-report data (Houtepen et al., 2020; Radford et al., 2013).

Five studies were conducted in schools (Chester et al., 2017; Jackson et al., 2016; Purdy & York, 2016; Smith et al., 2008; Smith & Shu, 2000), with the remainder either a self-report paper questionnaire, a self-report online questionnaire, a face-to-face structured interview, or CASI (computer assisted self-interviewing), completed at home or in a clinic setting. Sample sizes ranged from 90 to 151,396, and response rates, where reported, ranged from 18.6 % (McGavock & Spratt, 2017) which was in a university campus setting, to 96 % (Bevilacqua et al., 2017) in a school classroom setting. Twelve out of the 23 included studies did not report response rates.

Studies used a range of instruments and methods when collecting prevalence data. Four studies used the Olweus Bully/Victim Questionnaire adapted versions (Chester et al., 2017; Smith et al., 2008; Smith & Shu, 2000), three used the Adverse Childhood Experiences (ACE) Questionnaire or the Short ACE Tool (Bellis et al., 2014; Bellis et al., 2015; McGavock & Spratt, 2017), two studies used the Juvenile Victimisation Questionnaire (JVQ) (Jackson et al., 2016; Radford et al., 2013). Single studies used the Revised Cyberbullying Inventory (RCBI) (Brewer & Kerslake, 2015), the Childhood Trauma Screener (Chaplin et al., 2021), the Checklist to Assess Sexual Exploitation (Ireland et al., 2015) and the Bullying and Friendship Interview Schedule (Wolke et al., 2012). Five studies used an instrument developed or adapted for the study (Houtepen et al., 2020; Leung et al., 2016; May-Chahal & Cawson, 2005; Oaksford, 2001; Purdy & York, 2016), three used a blend of instruments (Bevilacqua et al., 2017; Charak et al., 2020; Denholm et al., 2013), and one study did not report the instrument used (Coid et al., 2020). Table 1 presents key methodological information extracted from each study. Prevalence estimates for all included studies are detailed in supplementary appendix 4.

3.1. Quality assessment

Scores ranged from 4 to 11 out of 11, with only one study achieving a score of 11 (Chester et al., 2017), and six studies achieving a score of 9 or 10 (Bellis et al., 2014; Bevilacqua et al., 2017; Charak et al., 2020; Denholm et al., 2013; May-Chahal & Cawson, 2005; Radford et al., 2013). Two studies scored 4 (McGavock & Spratt, 2017; Stonard, 2021), three scored 5 (Brewer & Kerslake, 2015; Coid et al., 2020; Leung et al., 2016), and three scored 6 (Ireland et al., 2015; Oaksford, 2001; Smith et al., 2008). Studies were generally scored lower and considered high risk of bias due to lack of reliability and validity of the instrument used, the lack of a representative sample, or a lack of random selection process when selecting a sample. The quality assessment and scoring results are set out in Supplementary appendix 5.

Table 2Pooled prevalence estimates based on studies in the UK by violence type.

Violence type	Pooled prevalence estimates based on all studies*								
	Data points	Pooled prevalence %	95 % CI	I ² (%)	Cochran's Q	Test for heterogeneity (p-value)			
Child maltreatment									
Physical abuse	12	7.30	[2.38, 14.35]	99.56	2515.95	< 0.001			
Emotional abuse	10	11.84	[5.58, 19.89]	99.63	2402.41	< 0.001			
Sexual abuse ^b	6	0.82	[0.00, 2.23]	97.97	246.30	< 0.001			
Neglect	9	9.47	[2.47, 19.74]	99.77	3497.48	< 0.001			
Domestic violence exposure	10	11.90	[6.34, 18.84]	99.67	2706.13	< 0.001			
Intimate partner/dating violence	5	7.85	[0.35, 21.27]	99.07	429.85	< 0.001			
All sexual abuse/violence combined ^b	20	6.6	[0.68, 16.69]	99.62	4992.28	< 0.001			
Community violence									
Bullying (all) ^c	15	22.75	[13.25, 33.86]	99.71	4904.73	< 0.001			
Sexual violence ^b	14	8.81%	[2.41, 18.18]	99.31	1886.24	< 0.001			
Community violence ^a	9	27.33	[9.84, 48.97]	99.74	3077.11	< 0.001			

^{*} Please note that prevalence estimates for specific types of violence cannot be added as multiple co-occurring exposures are common.

^a Community violence here is other community violence excluding bullying and sexual violence as shown in Fig. 1. Peer inflicted violence in one study was included as community violence (McGavock & Spratt, 2017) and property, physical and witnessed victimisation in one study were included as community violence (Jackson et al., 2016), as the conceptual definitions fit best for the purposes of this paper.

^b Sexual abuse is included as a form of maltreatment inflicted by parents or caregivers, and sexual violence as inflicted by anyone other than parents or caregivers, to align with the definitions used in our included studies. Both types include any forms of sexual violence, rape, or exploitation, and can be contact or non-contact. Sexual abuse/violence combined includes all data points in both these categories.

^c Bullying (all) includes all data for both traditional and cyberbullying.

3.2. Primary analyses

The results of the primary analyses are presented in Table 2. Of the 23 included studies, 11 reported prevalence of child maltreatment (emotional, physical, sexual, neglect and exposure to domestic violence), though only three of these measured all five types of maltreatment; three studies reported intimate partner violence or dating violence in childhood (under 18 years); thirteen studies reported bullying experience; 10 reported sexual violence including contact or non-contact sexual violence, sexual exploitation, and rape by a non-parent or caregiver; and 4 reported experience of community violence, including experiencing or witnessing physical or property violence in the community, and exposure to or experience of violence in the community with a weapon. Past year data was used for those under 18 years at recall, and lifetime prevalence data used for those over 18 years at recall.

The most common self-reported experience of childhood violence was community violence, which was estimated at 27.33% (95% confidence interval [CI] = [9.84, 48.97]), with experience of any form of bullying also estimated with a high prevalence of 22.75% (95% CI [13.25, 33.86]). The most prevalent forms of child maltreatment sub-types in these estimations were exposure to domestic violence at 11.9% (95% CI [6.34, 18.84]) and emotional maltreatment estimated at 11.84% (95% CI [5.58, 19.89]). Tests for heterogeneity were highly significant across all violence types and may represent large methodological diversity among studies. Forest plots representing all primary and subgroup analyses are in supplementary appendix 6.

3.3. Subgroup/secondary analyses

Pooled prevalence estimates for traditional bullying and cyberbullying and contact sexual violence and non-contact sexual violence as a two exposure groups model are shown in Table 3. Traditional bullying was estimated as far more prevalent than cyberbullying, with traditional bullying prevalence in the United Kingdom estimated at 32.66 % (95 % CI [23.92, 42.03]) and cyberbullying estimated as 3.98 % (95 % CI [0.00, 16.73]), although there was less data available for cyberbullying. There was less discrepancy between contact and non-contact sexual violence, with contact sexual violence estimated at 8.80 % (95 % CI [3.76, 15.52]) and prevalence of non-contact sexual violence 7.10 % (95 % CI [0.00, 42.73]). Forest plots visualising these individual analyses are in supplementary appendix 6.

3.3.1. Prevalence of violence types by gender and age

The results of secondary analyses based on gender, and age groups at recall, are presented in Tables 4 and 5. Table 4 gives the pooled prevalence of violence types for two exposure groups (boys and girls) for all violence types for which sufficient data were available. Bullying subgroups were not possible for the gender analysis due to insufficient data.

The largest discrepancies between genders were for sexual violence and community violence. Prevalence of experiencing sexual abuse by anyone (sexual abuse inflicted by parents or care givers and sexual violence by peer, acquaintances or strangers combined) among girls in this study was 9.98 % (95 % CI [1.16, 24.30]) more than double that for boys at 4.54 % (95 % CI [0.29, 12.2]). It is possible that overlapping low estimates for these gender subgroups are produced by studies with limitations in survey instrumentation producing underestimates, and that the studies with more rigorous definitions producing more reliable estimates (represented by upper bounds) more accurately indicate prevalence, which would be consistent with the overwhelming consensus from all sexual violence prevalence studies in societies comparable to the UK. Conversely, community violence victimisation was much higher among boys than girls, with pooled prevalence estimates for boys at 43.1 % (95 % CI [17.68, 70.39]). Estimates for community violence among girls were lower at 29.69 % (95 % CI [8.01, 56.85]), although still high. Confidence intervals overlap here too so significant differences cannot be assumed.

Table 5 gives pooled prevalence estimates of violence types in two sub-groups based upon age at recall – under 18 years and over 18 years, where sufficient data was available. The largest discrepancies among the age sub-categories are in neglect and sexual violence, whilst for other violence types prevalence estimates remain relatively consistent across the age groups. Pooled prevalence estimates for neglect are higher in the under 18 age group at 14.97 % (95 % CI [3.52, 31.41]) compared to the adult respondents at 5.51 % (95 % CI [0.00, 16.46]). Sexual violence, on the other hand has much higher pooled prevalence estimates in the adult respondents' group 9.39 % (95 % CI [3.02, 18.41]), compared with the under 18 age group 4.06 % (95 % CI [0.60, 9.78]). Forest plots for all secondary analyses can be found in supplementary appendix 6.

4. Discussion

This study fills an important evidence gap by conducting the first systematic review and meta-analysis of the self-reported

Table 3Pooled prevalence estimates based on a two exposure groups model for bullying and sexual violence.

Violence type	Pooled prevalence estimates based on exposure groups									
	Data points	Pooled prevalence %	95 % CI	I ² (%)	Cochran's Q	Test for heterogeneity (p-value)				
Traditional bullying	10	32.66	[23.92, 42.03]	99.52	1873.41	< 0.001				
Cyberbullying	5	3.98	[0.00, 16.73]	97.71	174.61	< 0.001				
Contact sexual violence	6	8.80	[3.76, 15.52]	98.99	497.19	< 0.001				
Non-contact sexual violence	3	7.10	[0.00, 42.73]	99.00	200.44	< 0.001				

Table 4Subgroup analysis of prevalence of violence types by gender.

Violence type	Pooled prevalence estimates by gender									
	Gender	Data points	Pooled prevalence %	95 % CI	I ² (%)	Cochran's Q	Test for heterogeneity (p-value)			
Child maltreatment										
Physical abuse ^d	Boys	9	7.44	[2.80, 13.86]	99.32	1183.55	< 0.001			
	Girls	8	7.89	[2.89, 14.90]	99.22	896.08	< 0.001			
Emotional abuse ^d	Boys	7	10.86	[3.95, 20.34]	99.42	1038.14	< 0.001			
	Girls	7	13.91	[7.25, 22.20]	99.33	893.34	< 0.001			
Sexual abuse ^d	Boys	4	0.67	[0.18, 1.43]	91.06	33.56	< 0.001			
	Girls	3	1.53	[0.00, 4.71]	97.53	81.14	< 0.001			
Neglect ^{a,d}	Boys	6	8.32	[0.91, 20.58]	99.76	2091.62	< 0.001			
	Girls	5	10.01	[2.23, 21.69]	99.67	1196.07	< 0.001			
Domestic violence exposure ^d	Boys	7	13.05	[7.37, 20.0]	99.45	1089.11	< 0.001			
	Girls	6	15.68	[9.04, 23.67]	99.32	739.84	< 0.001			
Violence not by parent/caregiv	ver									
Dating violence ^d	Boys	3	11.0	[0.00, 30.77]	97.83	92.10	< 0.001			
g	Girls	3	13.86	[0.00, 45.39]	98.96	191.57	< 0.001			
Any sexual abuse/violence ^d	Boys	11	4.54	[0.29, 12.2]	99.18	1219.38	< 0.001			
•	Girls	11	9.98	[1.16, 24.30]	99.47	1902.74	< 0.001			
Bullying (all) ^{c,d}	Boys	7	22.24	[8.46, 39.75]	99.81	3159.71	< 0.001			
	Girls	7	24.76	[12.16, 39.87]	99.76	2455.02	< 0.001			
Sexual violence ^d	Boys	7	6.49	[2.25, 12.49]	96.43	168.01	< 0.001			
	Girls	8	12.61	[3.71, 25.16]	98.68	531.97	< 0.001			
Contact sexual violence ^d	Boys	4	5.23	[2.33, 9.13]	96.02	11.38	<0.001			
	Girls	5	11.41	[7.43, 16.09]	94.83	77.35	< 0.001			
Non-contact sexual violence ^d	Boys	2	4.33	[0.00, 22.21]	91.21	11.38	< 0.001			
	Girls	3	8.61	[0.00, 49.13]	99.01	202.68	< 0.001			
Community violence ^{b,d}	Boys	6	43.1	[17.68, 70.39]	98.51	335.91	< 0.001			
-	Girls	6	29.69	[8.01, 56.85]	99.40	833.32	< 0.001			

^a Only lifetime prevalence data was available for neglect in the gender subgroups.

Table 5Subgroup analysis of prevalence of violence types by age at reporting.

Violence type	Pooled prev	alence estim	ates based on age groups				
	Age group	Data points	Pooled prevalence %	95 % CI	I ² (%)	Cochran's Q	Test for heterogeneity (p-value)
Child maltreatment							
Physical abuse ^{a,b}	< 18 years	3	10.59	[0.00, 26.90]	99.78	920.65	< 0.001
	18 years +	9	7.68	[3.63, 12.99]	99.13	918.43	< 0.001
Emotional abuse ^{a,b}	< 18 years	3	11.54	[0.00, 34.56]	99.87	1556.37	< 0.001
	18 years +	7	11.77	[5.55, 19.77]	99.23	782.88	< 0.001
Neglect ^{a,b}	< 18 years	3	14.97	[3.52, 31.41]	99.68	633.54	< 0.001
	18 years +	6	5.51	[0.00, 16.46]	99.65	1435.67	< 0.001
Domestic violence exposure ^a ,	< 18 years	3	12.54	[0.00, 36.29]	99.87	1570.06	< 0.001
b	18 years +	7	11.96	[6.68, 18.45]	99.41	1008.44	<0.001
Violence not by parent/caregi	ver						
Sexual violence ^{a,b}	< 18 years	6	4.06	[0.60, 9.78]	99.33	745.24	< 0.001
	18 years +	12	9.39	[3.02, 18.41]	98.87	969.31	< 0.001
Community violence b,c	< 18 years	5	35.37	[7.4, 69.19]	99.77	1767.40	< 0.001
	18 years +	4	41.19	[14.34, 70.80]	99.66	889.68	<0.001

^a One study presented data from those aged 0–22 years at recall, so was included in the <18 years subgroup.

prevalence of five forms of violence against children and adolescents in the UK. This study presents pooled prevalence estimates, using quality-effects models, of child maltreatment including physical, sexual, and emotional abuse, neglect, and exposure to domestic violence, intimate partner violence, sexual violence, bullying and cyberbullying, and community violence against those aged under 18

b Community violence refers to other community violence excluding sexual violence and bullying.

^c Bullying (all) includes all data for both traditional and cyberbullying.

^d Radford data is all lifetime prevalence summed across age groups in the gender subgroup analysis, as information on gender split within age groups was not available.

b Past year prevalence is presented for the <18 years age group, and lifetime (before the age of 18) prevalence data for the 18 years + age group.

^c Community violence refers to other community violence excluding sexual violence and bullying.

years, using data from 23 studies based in the UK.

Child maltreatment by parents and caregivers. In relation to child maltreatment by parents and caregivers in the home (physical abuse, sexual abuse, emotional abuse, neglect, and exposure to domestic violence), our results show a notable difference between children who have been identified by government agencies as requiring interventions due to either being survivors of maltreatment, or being considered at serious risk of suffering maltreatment, and placed on child protection plans (0.36 % of the 2022 UK child population, 50,920 children) and the self-reported incidence of maltreatment in this study, which ranged from 0.82 % for sexual abuse, to 11.84 % for emotional abuse and 11.90 % for exposure to domestic violence (Gov.uk, 2022). Our pooled prevalence estimates are consistent with the finding by Radford et al. (2013) that self-reported cases of child maltreatment are 7 to 17 times greater than official statistics. It is worth noting that only three included studies in this review measured all five forms of child maltreatment. The implications of this finding for policy-makers are profound. While not all experiences of child maltreatment are the same in nature and outcome, and different risk profiles require different levels of intervention and or support, there is a clear need for massive investment to better prevent maltreatment, and to respond to social and clinical needs of children, parents and communities.

Our pooled estimates show substantially different prevalence estimates for several maltreatment types compared with other studies. For example, for physical abuse, our pooled estimate of 7.3 % is substantially lower than the estimate of 22.6 % generated in a global meta-analysis (Stoltenborgh et al., 2011) and the estimate generated in the recent national study in Australia (32.0 %) (Mathews et al., 2023), but is similar to the estimate of 8.4 % generated in the large UK study by Radford et al. (2013), which included a random sample of 18–24 year olds providing responses about experiences across the entire span of childhood. Similarly, for emotional abuse, our pooled estimate of 11.84 % is substantially lower than the global estimate of 36.3 % (Stoltenborgh et al., 2011), and the estimate generated in the recent Australian study (30.9 %) but exceeds the estimate of 6.9 % generated in Radford et al. (2013). The difference between the pooled estimates and those found by these other studies can be attributable to several factors, including the level of rigour with which maltreatment types were defined and operationalised in survey instrumentation, the use of behaviourally-specific questions, and the use of more than one question to assess each maltreatment type, along with the issues of comparing estimates from the UK with those generated in other socio-political and cultural environments (Mathews et al., 2020). This underscores the need for future studies in the UK to employ rigorous and culturally appropriate survey instrumentation to measure prevalence of the various types of maltreatment and violence. Future studies should also be transparent and comprehensive in explaining and justifying the approaches adopted, and should acknowledge the nature of any differences and limitations in comparing approaches and outcomes with those of other significant or comparable UK and overseas studies.

Differential prevalence of violence types. By far the highest rates of self-reported violence against children in this review were for bullying and community violence, with weighted prevalence estimates at 27.33 % and 22.75 % respectively. When analysing by gender subgroups, the pooled prevalence of bullying was estimated to be similar among boys and girls in this study, which was also found to be the case in a recent study in Australia (Jadambaa et al., 2019). Community violence had very high prevalence rates among boys, at 43.1 % compared with 29.69 % for girls. Prevalence estimates for community violence were also very high for the over 18 years of age retrospective reporting subgroup, at 41.19 %. These UK findings are in line with a previous victimisation survey in the United States in 2011 which reported 36.4 % of 14- to 17-year-olds witnessed community violence in the past year, although the US study includes direct and witnessed (indirect) victimisation (Finkelhor et al., 2013). Other reviews and meta-analyses in the US have suggested over 50 % prevalence rates for community violence among children and adolescents in urban settings (Fowler et al., 2009; Stein et al., 2003).

Gendered violence: increased risk for girls and priority interventions. A core finding of this analysis for policy-makers is that our prevalence estimates demonstrate an urgent need for prevention and intervention for all children, but with additional specific focus on girls' increased risk of sexual and emotional abuse. Sexual and emotional maltreatment types showed a heightened risk for girls in this study, which sits in line with previous studies in both the USA and Australia, though these studies define sexual maltreatment differently (Finkelhor et al., 2014, 2015; Mathews et al., 2023). There were similarities in prevalence rates between genders for physical maltreatment, neglect, and exposure to domestic violence, which also mirrors the findings from a recent large Australian study (Mathews et al., 2023). There was no available data for non-binary children in this review, who are at higher risk of abuse according to previous research (Mathews et al., 2023). Aside from community violence, sexual violence or abuse (as a combined category) in childhood showed the biggest discrepancy in prevalence between boys and girls, with prevalence among girls estimated at 9.98 %, more than double that of boys at 4.54 %, with 6.6 % prevalence overall. This sits almost in line with a previous meta-analysis of global prevalence of childhood sexual violence, which found overall prevalence rates of 11.8 %, and a similar discrepancy between genders, with female global prevalence rates at 18 % compared with male samples at 7.6 % (Stoltenborgh et al., 2011). The prevalence rates in Europe in the same study were similar to those found in the UK in this study, 13.5 % for girls and 5.6 % for boys (Stoltenborgh et al., 2011). Interestingly, unlike the present study, this global prevalence study included both combined prevalence from self-report studies, and from informant studies, and found a larger than expected discrepancy here, with self-report studies producing rates of sexual victimisation 30 times higher than those of informant studies (12.7 % compared with 0.4 %) (Stoltenborgh et al., 2011). As staggering as this difference is, it is unfortunately not surprising when we compare the prevalence rates generated here for any sexual victimisation, with 73,260 police recorded incidence of sexual offences against a child across one year in the UK, which equates to 0.52 % of the estimated UK child population (Office for National Statistics, 2020). The most recent figures from the Office for National Statistics show that up to the end of March 2019, 2230 children in England had been assigned a child protection plan and 120 children in Wales were on the child protection register, for either experiencing or being considered at risk of experiencing sexual abuse (Office for National Statistics, 2020). These figures are again very low when compared with the 6.6 % prevalence rates in this study of any sexual abuse or violence.

Bullying. Pooled prevalence estimates for bullying in this study were 22.75 % overall, but there were large differences in subgroup

analyses, with traditional bullying prevalence at 32.66 % and cyberbullying only 3.98 %, though there were far fewer data points available for cyberbullying, so this may account for some difference. A recent meta-analysis of bullying prevalence in Australia found overall lifetime bullying victimisation prevalence estimates of 18.90 %, similar to those found here (Jadambaa et al., 2019). This study also found a similar difference between types of experience, with prevalence estimates of 25.13 % for traditional bullying and 7.02 % for cyberbullying, though also had far fewer data points for cyberbullying compared with traditional bullying, likely due to the relatively recent development of technology used for cyberbullying perpetration. Previously, another meta-analysis in Australia also found rates of cyberbullying (15 %) less than half of those of traditional bullying (35 %), along with a large study in the US and Norway which also found cyberbullying to be a considerably less prevalent form of bullying in these locations (Modecki et al., 2014; Olweus, 2012). It is worth considering that it is likely that youth who are perpetrators of traditional bullying will often also be perpetrators of cyberbullying (Jadambaa et al., 2019). In this meta-analysis we found studies measuring traditional bullying only, cyberbullying only, and some that measured both. It is possible that some studies assessing only traditional bullying may inadvertently gather data on cyberbullying perpetration if the youth responding are not made completely clear that traditional bullying events should have occurred offline. A clear implication of this analysis for both policy-makers and researchers is the need to better understand the prevalence of different discrete forms of bullying victimisation, with particular attention needed in relation to cyberbullying.

Intimate partner violence. The violence type for which there was the least data available in the UK for survivors under the age of 18 was intimate partner violence. The five studies we did retrieve gave pooled prevalence estimates of 7.85 % overall, with 11 % for boys and 13.86 % for girls in subgroup analyses. The difference between genders here was perhaps not as large as might initially be expected, given the higher prevalence for female survivors in the sexual violence and maltreatment categories. Our findings are similar to the 2015 Youth Risk Behaviour Survey of high school students in the US, which found 21.4 % of females and 9.6 % of males reported experiencing violence by a partner in the previous year, though this gender discrepancy is larger, as might be expected (Miller & McCaw, 2019). Other studies have found gender differences in types of intimate partner violence victimisation, with one meta-analysis finding in those aged 13-18 years, more girls perpetrate physical dating violence whilst boys perpetrate more sexual dating violence (Wincentak et al., 2017). Another study found similar differences but in reports of victimisation, with more girls reporting psychological violence and more boys reporting physical victimisation (Rivera-Rivera et al., 2007). There is a lack of reliable prevalence data in the UK for all violence against children, but most notably for intimate partner violence. Prevalence rates varied widely among the studies in this review, from 3 % to 30 % depending upon the type of victimisation and the measurement, again showing the dramatic differences in prevalence estimates produced by different levels of rigour in survey instrumentation and sampling. This issue has previously been noted more widely in the literature from other countries, and prevalence rates of physical dating violence in a previous study ranged from 1 % to 61 %, indicating a need for more effective measures of prevalence (Jennings et al., 2017; Wincentak et al., 2017). Although many youth will not enter intimate relationships before turning 18, a considerable proportion do, and it is important for policy-makers and researchers to better understand the prevalence and nature of violence in this domain in future studies.

Understanding the overall experience of violence. The various forms of violence against children are closely interconnected, both with individual experiences and across generations, and hence we did not combine prevalence estimates in this meta-analysis as this would overestimate the overall prevalence of interpersonal violence against children. The best estimate of overall prevalence in the UK to date was the NSPCC's study of child maltreatment (Radford et al., 2013) which reported an overall lifetime prevalence of 87.3 % of any childhood violence victimisation in the population of those aged under 18 years (only 12.7 % of participants reported not experiencing violence in childhood). This is comparable to the Developmental Victimisation Survey in the US which found lifetime prevalence of any victimisation at 86.6 % (Finkelhor, Turner, et al., 2009). Furthermore, data from the 2013 study indicated that 41.4 % of children under 11 years and 57.1 % of children 11–17 years of age had experienced violence in the past year which would equate to 6,592,686 million children in the UK in 2021 (this is likely an underestimate given violence against children may have intensified over the COVID-19 pandemic lockdowns).

5. Limitations

Although the current study provides the first meta-analysis of the self-reported prevalence of various forms of violence against children and adolescents in the UK, several limitations should be kept in mind. One of the main issues with a study of this nature is that violence against children has been measured using different tools and methods and definitions, rather than a standardised measurement tool, along with standardised definitions (Stoltenborgh et al., 2011). This lack of standardised measurement of these experiences may account for the wide variation in prevalence estimates among studies. This study also found differences in methodological approaches such as recall period, with some offering lifetime prevalence data and others offering past year, or past three months prevalence data; those assessing childhood experiences at any time in childhood may generate more reliable data. Due to variations in types of violence reported, variations in timings and limited data on the co-occurrence of violence types it was difficult to estimate violence against children overall in the meta-analyses and the best estimate of prevalence of violence against children overall was based on results from one study (Radford et al., 2013). Abuse can have an impact on memory and recall, there is often low agreement between retrospective and prospective reporting of abuse, and individuals may be less able to recount abuse victimisation if they were young at the time or a lot of time has passed since the experience (Hardt & Rutter, 2004; Pinto Pereira et al., 2021). For these reasons, the wide variety in recall periods among studies here may account for some of the wide-ranging prevalence estimates. Significant heterogeneity was present across these analyses and remained in the subgroup analyses too. We were unable to conduct subgroup analyses for some of the violence types by age group and gender due to insufficient data points. Only six out of the 23 included studies used fully nationally representative samples, so prevalence rates may have been under or overestimated in some studies as a result. This may mean that findings cannot be so confidently generalised to the whole UK population, however with so few studies providing prevalence information on this topic, we didn't wish to limit our data points further. Studies may have been missed in this systematic review, though we did try to limit publication bias by including grey literature. This study focuses on interpersonal violence and hence does not consider the impact of war and conflict on children. Online grooming, county lines and other criminal exploitation of children were not measured in the included studies.

6. Conclusions

This review provides, to date, the best weighted prevalence estimates of five types of violence against children in the UK. National surveys are needed in the UK, using a comprehensive and conceptually robust approach to provide nuanced, useful data for researchers and policymakers on the prevalence of violence against children. These should use valid and reliable instruments, which operationalise violence types effectively, and measure experience of all forms of violence against children including exposure to multiple types. These should measure the severity and frequency of experiences, along with the relationship to the perpetrator. Data on past year incidence as well as lifetime prevalence should also be collected. These data would allow monitoring of trends over time, inform strategies for prevention, and can enable monitoring of future progress in reducing violence against children and its associated health and economic burden in the UK.

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Data availability

The authors do not have permission to share data.

References

- Barendregt, J. J., Doi, S. A., & Lee, Y. Y. (2013). Meta-analysis of prevalence. *Journal of Epidemiology and Community Health*. https://doi.org/10.1136/jech Bellis, M. A., Hughes, K., Leckenby, N., Hardcastle, K. A., Perkins, C., & Lowey, H. (2015). Measuring mortality and the burden of adult disease associated with adverse childhood experiences in England: A national survey. *Journal of Public Health*, *37*(3), 445–454. Oxford University Press https://doi.org/10.1093/pubmed/fdu065.
- Bellis, M. A., Lowey, H., Leckenby, N., Hughes, K., & Harrison, D. (2014). Adverse childhood experiences: Retrospective study to determine their impact on adult health behaviours and health outcomes in a UK population. *Journal of Public Health*, 36(1), 81–91. https://doi.org/10.1093/pubmed/fdt038
- Bevilacqua, L., Shackleton, N., Hale, D., Allen, E., Bond, L., Christie, D., ... Viner, R. M. (2017). The role of family and school-level factors in bullying and cyberbullying: A cross-sectional study. *BMC Pediatrics*, 17(1). https://doi.org/10.1186/s12887-017-0907-8
- Brewer, G., & Kerslake, J. (2015). Cyberbullying, self-esteem, empathy and loneliness. Computers in Human Behavior, 48, 255–260. https://doi.org/10.1016/j.chb.2015.01.073
- Chaplin, A. B., Jones, P. B., & Khandaker, G. M. (2021). Sexual and physical abuse and depressive symptoms in the UK Biobank. BMC Psychiatry, 21(1), 248. https://doi.org/10.1186/s12888-021-03207-0
- Charak, R., Vang, M. L., Shevlin, M., Ben-Ezra, M., Karatzias, T., & Hyland, P. (2020). Lifetime interpersonal victimization profiles and mental health problems in a nationally representative panel of trauma-exposed adults from the United Kingdom. *Journal of Traumatic Stress*, 33(5), 654–664. https://doi.org/10.1002/its.2257
- Chester, K. L., Spencer, N. H., Whiting, L., Brooks, F., & Dhr, M. (2017). Association between experiencing relational bullying and adolescent health-related quality of life. *Journal of School Health*, 87, 865–872.
- Cicchetti, D., Hetzel, S., Rogosch, F. A., Handley, E. D., & Toth, S. L. (2016). An investigation of child maltreatment and epigenetic mechanisms of mental and physical health risk. *Development and Psychopathology*, 28(4), 1305–1317. https://doi.org/10.1017/S0954579416000869
- Coid, J., González, R. A., Kallis, C., Zhang, Y., Liu, Y. Y., Wood, J., ... Ullrich, S. (2020). Gang membership and sexual violence: Associations with childhood maltreatment and psychiatric morbidity. *British Journal of Psychiatry*, 217(4), 583–590. https://doi.org/10.1192/bjp.2020.69
- Denholm, R., Power, C., Li, L., & Thomas, C. (2013). Child maltreatment and household dysfunction in a British Birth Cohort. Child Abuse Review, 22(5), 340–353. https://doi.org/10.1002/car.2235
- Doi, S. A. R., & Thalib, L. (2008). A quality-effects model for meta-analysis. *Epidemiology*, 19(1), 94–100. https://doi.org/10.1097/EDE.0b013e31815c24e7 Finkelhor, D., Ormrod, R., Turner, H., & Holt, M. (2009). Pathways to poly-victimization. *Child Maltreatment*, 14(4), 316–329. https://doi.org/10.1177/1077559509347012
- Finkelhor, D., Shattuck, A., Turner, H. A., & Hamby, S. L. (2014). The lifetime prevalence of child sexual abuse and sexual assault assessed in late adolescence. *Journal of Adolescent Health*, 55(3), 329–333. https://doi.org/10.1016/j.jadohealth.2013.12.026
- Finkelhor, D., Turner, H., Ormrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics, 124*(5), 1411–1423. https://doi.org/10.1542/peds.2009-0467
- Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby, S. L. (2013). Violence, crime, and abuse exposure in a national sample of children and youth an update. *JAMA Pediatrics*, 167(7), 614–621. https://doi.org/10.1001/jamapediatrics.2013.42
- Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby, S. L. (2015). Prevalence of childhood exposure to violence, crime, and abuse: Results from the National Survey of Children's Exposure to Violence. *JAMA Pediatrics*, 169(8), 746–754. https://doi.org/10.1001/jamapediatrics.2015. 0676
- Fowler, P. J., Tompsett, C. J., Braciszewski, J. M., Jacques-Tiura, A. J., & Baltes, B. B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology*, 21(1), 227–259. https://doi.org/10.1017/S0954579409000145
- Gilbert, R., Fluke, J., O'Donnell, M., Gonzalez-Izquierdo, A., Brownell, M., Gulliver, P., ... Sidebotham, P. (2012). Child maltreatment: Variation in trends and policies in six developed countries. *The Lancet*, 379(9817), 758–772. Elsevier B.V. https://doi.org/10.1016/S0140-6736(11)61087-8
- Gov.uk. (2022). Characteristics of children in need, Reporting year 2022 Explore education statistics. https://explore-education-statistics.service.gov.uk/find-statistics/characteristics-of-children-in-need#dataBlock-1da023da-5d1b-44af-c150-08daa787e284-charts (accessed 22/03/2023).
- Hardt, J., & Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood experiences: Review of the evidence. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 45*(2), 260–273. https://doi.org/10.1111/j.1469-7610.2004.00218
- Hillis, S., Mercy, J., Amobi, A., & Kress, H. (2016). Global prevalence of past-year violence against children: A systematic review and minimum estimates. *Pediatrics*, 137(3). https://doi.org/10.1542/peds.2015-4079. American Academy of Pediatrics.

- Houtepen, L. C., Heron, J., Suderman, M. J., Fraser, A., Chittleborough, C. R., & Howe, L. D. (2020). Associations of adverse childhood experiences with educational attainment and adolescent health and the role of family and socioeconomic factors: A prospective cohort study in the UK. *PLoS Medicine*, *17*(3), Article e1003031. https://doi.org/10.1371/journal.pmed.1003031
- Hoy, D., Brooks, P., Woolf, A., Blyth, F., March, L., Bain, C., Baker, P., Smith, E., & Buchbinder, R. (2012). Assessing risk of bias in prevalence studies: Modification of an existing tool and evidence of interrater agreement. *Journal of Clinical Epidemiology*, 65(9), 934–939. https://doi.org/10.1016/j.jclinepi.2011.11.014
- Ireland, C. A., Alderson, K., & Ireland, J. L. (2015). Sexual exploitation in children: Nature, prevalence, and distinguishing characteristics reported in young adulthood. *Journal of Aggression, Maltreatment and Trauma*, 24(6), 603–622. https://doi.org/10.1080/10926771.2015.1049765
- Jackson, V., Browne, K., & Joseph, S. (2016). The prevalence of childhood victimization experienced outside of the family: Findings from an English prevalence study. Child Abuse and Neglect, 51, 343–357. https://doi.org/10.1016/j.chiabu.2015.08.006
- Jadambaa, A., Thomas, H. J., Scott, J. G., Graves, N., Brain, D., & Pacella, R. (2019). Prevalence of traditional bullying and cyberbullying among children and adolescents in Australia: A systematic review and meta-analysis. Australian and New Zealand Journal of Psychiatry, 53(9), 878–888. https://doi.org/10.1177/0004867419846393
- Jennings, W. G., Okeem, C., Piquero, A. R., Sellers, C. S., Theobald, D., & Farrington, D. P. (2017). Dating and intimate partner violence among young persons ages 15–30: Evidence from a systematic review. Aggression and Violent Behavior, 33, 107–125. https://doi.org/10.1016/j.avb.2017.01.007
- Kovler, M. L., Ziegfeld, S., Ryan, L. M., Goldstein, M. A., Gardner, R., Garcia, A. V., & Nasr, I. W. (2021). Increased proportion of physical child abuse injuries at a level I pediatric trauma center during the Covid-19 pandemic. *Child Abuse and Neglect*, 116. https://doi.org/10.1016/j.chiabu.2020.104756
- Lawrence, D. M., Hunt, A., Mathews, B., Haslam, D. M., Malacova, E., Dunne, M. P., ... Scott, J. G. (2023). The association between child maltreatment and health risk behaviours and conditions throughout life in the Australian Child Maltreatment Study. *The Medical Journal of Australia, 218*, S34–S39. https://doi.org/10.5694/mia2.51877
- Leung, J. P. K., Britton, A., & Bell, S. (2016). Adverse childhood experiences and alcohol consumption in midlife and early old-age. *Alcohol and Alcoholism*, 51(3), 331–338. https://doi.org/10.1093/alcalc/agv125
- Mathews, B., & Collin-Vézina, D. (2019). Child sexual abuse: Toward a conceptual model and definition. *Trauma, Violence & Abuse, 20*(2), 131–148. SAGE Publications Ltd https://doi.org/10.1177/1524838017738726.
- Mathews, E., Pacella, R., Dunne, M. P., Simunovic, M., & Marston, C. (2020). Improving measurement of child abuse and neglect: A systematic review and analysis of national prevalence studies. *PLoS One*, 15(1), Article e0227884. https://doi.org/10.1371/journal.pone.0227884
- Mathews, B., Pacella, R., Scott, J. G., Finkelhor, D., Meinck, F., Higgins, D. J., ... Dunne, M. P. (2023). The prevalence of child maltreatment in Australia: Findings from a national survey. *The Medical Journal of Australia*, 218, \$13–\$18. https://doi.org/10.5694/mja2.51873
- May-Chahal, C., & Cawson, P. (2005). Measuring child maltreatment in the United Kingdom: A study of the prevalence of child abuse and neglect. *Child Abuse and Neglect*, 29(9), 969–984. https://doi.org/10.1016/j.chiabu.2004.05.009
- McGavock, L., & Spratt, T. (2017). Children exposed to domestic violence: Using adverse childhood experience scores to inform service response. *British Journal of Social Work, 47*(4), 1128–1146. https://doi.org/10.1093/bjsw/bcw073
- Miller, E., & McCaw, B. (2019). Intimate partner violence, New England Journal of Medicine, 380(9), 850-857.
- Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health*, 55(5), 602–611. Elsevier Inc https://doi.org/10.1016/j.jadohealth.2014.06.007.
- Nation, A., Pacella, R., & Monks, C. (2023). Prevalence of violence against children in the United Kingdom: A systematic review and meta-analysis. PROSPERO International Prospective Measure of of Systematic Reviews., #CRD42022331793. https://www.crd.york.ac.uk/PROSPERO.
- Nelson, C. A., Scott, R. D., Bhutta, Z. A., Harris, N. B., Danese, A., & Samara, M. (2020). Adversity in childhood is linked to mental and physical health throughout life. BMJ, 371. https://doi.org/10.1136/bmj.m3048
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and Meta-analysis. *PLoS Medicine*, *9*(11). https://doi.org/10.1371/journal.pmed.1001349
- Oaksford, K. L. (2001). The prevalence and nature of child sexual abuse: Evidence from a female university sample in the UK. Child Abuse Review, 10.
- Office for National Statistics (ONS), released 9 February 2023, ONS website, article, Homicide in England and Wales: year ending March 2022. Homicide in England and Wales Office for National Statistics (ons.gov.uk).
- Office for National Statistics. (2017). People who were abused as children are more likely to be abused as an adult. https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/peoplewhowereabusedaschildrenaremorelikelytobeabusedasanadult/2017-09-27 (accessed 23/03/2023).
- Office for National Statistics. (2020). Child sexual abuse in England and Wales. https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/childsexualabuseinenglandandwales/yearendingmarch2019 (accessed 28/03/2023).
- Office for National Statistics. (2020a). Child abuse in England and Wales. https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/childabuseinenglandandwales/march2020 (accessed 23/03/2023).
- Olweus, D. (2012). Cyberbullying: An overrated phenomenon? European Journal of Developmental Psychology, 9(5), 520–538. https://doi.org/10.1080/17405629.2012.682358
- Pacella, R., Nation, A., Mathews, B., Scott, J. G., Higgins, D. J., Haslam, D. M., ... Monks, C. (2023). Child maltreatment and health service use: findings of the Australian Child Maltreatment Study. *Medical Journal of Australia*, 218, S40–S46.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372. https://doi.org/10.1136/bmj.n71. BMJ Publishing Group.
- Pinto Pereira, S. M., Rogers, N. T., & Power, C. (2021). Adult retrospective report of child abuse and prospective indicators of childhood harm: A population birth cohort study. *BMC Medicine*, 19(1), 286. https://doi.org/10.1186/s12916-021-02164-5
- Purdy, N., & York, L. (2016). A critical investigation of the nature and extent of cyberbullying in two post-primary schools in Northern Ireland. *Pastoral Care in Education*, 34(1), 13–23. https://doi.org/10.1080/02643944.2015.1127989
- Radford, L., Corral, S., Bradley, C., & Fisher, H. L. (2013). The prevalence and impact of child maltreatment and other types of victimization in the UK: Findings from a population survey of caregivers, children and young people and young adults. *Child Abuse and Neglect, 37*(10), 801–813. https://doi.org/10.1016/j.chiabu.2013.02.004
- Rivera-Rivera, L., Allen-Leigh, B., Rodríguez-Ortega, G., Chávez-Ayala, R., & Lazcano-Ponce, E. (2007). Prevalence and correlates of adolescent dating violence: Baseline study of a cohort of 7960 male and female Mexican public school students. *Preventive Medicine*, 44(6), 477–484. https://doi.org/10.1016/j.
- Scott, J. G., Malacova, E., Mathews, B., Haslam, D. M., Pacella, R., Higgins, D. J., ... Thomas, H. J. (2023). The association between child maltreatment and mental disorders in the Australian Child Maltreatment Study. *Medical Journal of Australia*, 218, S26–S33.
- Sidpra, J., Abomeli, D., Hameed, B., Baker, J., & Mankad, K. (2021). Rise in the incidence of abusive head trauma during the COVID-19 pandemic. Archives of Disease in Childhood. 106(3). 14.
- Smith, P., & Shu, S. (2000). What good schools can do about bullying: Findings from a survey in English schools after a decade of research and action. *Childhood*, 7(2),
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 49*(4), 376–385. https://doi.org/10.1111/j.1469-7610.2007.01846

- Stein, B. D., Jaycox, L. H., Kataoka, S., Rhodes, H. J., & Vestal, K. D. (2003). Prevalence of child and adolescent exposure to community violence. Clinical Child and Family Psychology Review, 6(4).
- Stoltenborgh, M., van IJzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. Child Maltreatment, 16(2), 79–101. https://doi.org/10.1177/1077559511403920
- Stonard, K. E. (2021). The prevalence and overlap of technology-assisted and offline adolescent dating violence. Current Psychology, 40(3), 1056–1070. https://doi.org/10.1007/s12144-018-0023-4
- United Nations General Assembly. (2015). Sustainable development goals. www.sdgs.un.org/goals (accessed 11/07/2023).
- Wincentak, K., Connolly, J., & Card, N. (2017). Teen dating violence: A meta-analytic review of prevalence rates. *Psychology of Violence*, 7(2), 224–241. American Psychological Association Inc https://doi.org/10.1037/a0040194.
- Wolke, D., Schreier, A., Zanarini, M. C., & Winsper, C. (2012). Bullied by peers in childhood and borderline personality symptoms at 11 years of age: A prospective study. Journal of Child Psychology and Psychiatry, and Allied Disciplines, 53(8), 846–855. https://doi.org/10.1111/j.1469-7610.2012.02542
- World Health Organisation. (2022). Violence against children. https://www.who.int/news-room/fact-sheets/detail/violence-against-children (accessed 26/04/2023).