ELSEVIER

Contents lists available at ScienceDirect

# Aggression and Violent Behavior

journal homepage: www.elsevier.com/locate/aggviobeh





# Sibling bullying during childhood: A scoping review

Hannah Brett\*, Alice Jones Bartoli, Peter K. Smith

Goldsmiths, Department of Psychology, University of London, UK

ARTICLE INFO

Keywords:
Bullying
Sibling bullying
Between-sibling bullying
Family relationships
Protective factors
Risk factors

#### ABSTRACT

Previous research has established that positive sibling relationships can be protective against peer bullying and general family conflicts, as well as improving self-esteem and development, but significantly less attention has been given to the situation when these relationships are not positive, specifically with bullying between siblings. Despite being viewed as a 'normal' part of growing up, the consequences of sibling bullying can be as harmful as that of peer bullying, if not more, and it is necessary to understand and address the problem. The current scoping review assesses the existing research on sibling bullying, with attention to what is currently known and what is yet to be understood. Four databases were searched, and 45 papers were identified and synthesised. Much of the literature was conducted in Western countries, with a focus on self-reported protective and risk factors. Moreover, much of the research has identified surface-level characteristics of sibling bullying, with limited explanation for why these issues arise. This scoping review highlights and discusses these findings and provides recommendations for further research.

#### 1. Background

Bullying is an increasingly well-understood phenomenon, with a vast amount of research being conducted over the previous three decades (Smith et al., 2021). In the early 1990s, Olweus outlined three components for identifying bullying: *intention to cause harm, repetition*, and an *imbalance of power* (Olweus, 1993). Traditionally, this has been applied to the abuse that occurs between peers in the schoolyard, but research has recognised the existence of bullying in other groups, such as in the workplace (Nielsen & Einarsen, 2018), in prisons (Ireland, 2011), and between siblings (Tucker et al., 2013).

A large proportion of children live with either a biological or legal sibling (52.5 %; Clark, 2022; 57.7 %; ONS, 2021). Relatedly, during adolescence children spend significantly more time with their siblings than their parents, teachers, peers, or alone (Tucker & Updegraff, 2009; Wolke & Skew, 2012); this is unsurprising considering the proximity that many siblings face in the family home, such as sharing bedrooms, activities, and life experiences. Positive sibling relationships have been associated with improved self-esteem, reduced delinquency, and protection against family problems and friendship disagreements (Tippett & Wolke, 2015; Wolke & Skew, 2012). Yet, sibling interactions may not always be positive, and can be characterised by bullying behaviours.

Sibling bullying is a relatively understudied area (Morrill et al., 2018; Tucker & Finkelhor, 2017). This may be partially explained by the

lack of an agreed definition: the terms violence, aggression, conflict, abuse, rivalry, and bullying are often used interchangeably in the literature (Coyle et al., 2017; Eriksen & Jensen, 2009). Moreover, there may be a tendency for researchers to view bullying as only occurring between peers: the Centre for Disease Control and Prevention (CDC) specifies that bullying occurs between "youths who are not siblings" (Gladden et al., 2014, p. 7). Yet, the types of bullying seen between peers can also be seen between siblings: they may cause physical harm to their siblings or their property, alongside displaying psychological and relational abuse (Tucker et al., 2013). Moreover, questions are beginning to be asked about whether sibling bullying spans to the cyberworld (Tanrikulu & Campbell, 2015). Overall, the lack of consistency in definitions is problematic for determining exactly what behaviours would constitute bullying, and what is perceived as 'normal' sibling disagreements. Popular media may help to reinforce the belief that sibling bullying is a normal part of growing up, with many shows and movies using sibling bullying as an element of comedy (Family Guy), to create a character arc (Stranger Things), or to build sympathy for the protagonist (Matilda).

This normalisation of sibling bullying may lead to an under-reporting of the issue and may explain the lack of consistent statistics (Hoetger et al., 2015; Wiehe, 1997). Coyle et al. (2017) note that prevalence rates for sibling bullying vary between 30 and 78 %, emphasising the lack of a clear understanding of the issue at hand. Nonetheless, there is agreement that sibling bullying has detrimental outcomes for those involved,

<sup>\*</sup> Corresponding author at: Department of Psychology, Goldsmiths, University of London, SE14 6NW, UK. *E-mail address*: hbret001@gold.ac.uk (H. Brett).

including having a negative impact on mental wellbeing, and increasing the risk of involvement in peer bullying (Bowes et al., 2014). These will be explored further within this review.

#### 2. Objectives

Although advances in understanding this topic are ongoing, there remains a need for more research and clarity in this field. A scoping review was perceived to be the most effective first tool for understanding the issue and mapping the key areas of interest. This was favoured for the objectivity and replicability not found in narrative reviews, but with the lack of a narrow question needed for a systematic review (Horsley, 2019). The primary objective was to explore what existing empirical literature had been conducted, with a focus on several questions:

- 1. What are the characteristics of the studies conducted?
- 2. What is the prevalence of sibling bullying? How does this compare with peer bullying?
- 3. What else do we know about sibling bullying?

The latter question was answered primarily through the themes of the included papers, but additional attention was given to the following:

- a. Who is most at risk?
- b. Does the 'type' of sibling (biological, half-, step-, adopted, foster) matter?
- c. Does family structure play a role?
- d. Do any other family-based factors play a role, such as socioeconomic status (SES), religion, education, age, or birth order?
- e. Are findings consistent in different cultures?
- f. What is the impact of sibling bullying?

#### 3. Method

The Joanna Briggs Institute's recommendations (Peters et al., 2017) were used to guide and structure the scoping review; in particular, the extraction of results and use of the adapted PRISMA-ScR (Fig. 1) were consistent with these recommendations. A protocol with a clearly outlined inclusion and exclusion criteria was registered on the Open Science Framework (osf.io).

#### 3.1. Inclusion and exclusion criteria

Consistent with the recommendations by Peters et al. (2017), less restrictive inclusion and exclusion criteria were implemented. This allowed for a more inclusive and thorough consideration of sibling bullying research.

#### 3.2. Participants

Papers must have been reporting on bullying occurring between children up to the age of 18; no other restrictions were implemented regarding participant characteristics, with both neurotypical and atypical samples being included. All countries, races, and religions were considered.

#### 3.3. Concept

Papers investigating 'sibling bullying' were included: these papers needed a clearly operationalised concept of bullying that fit the Olweus (1993) definition (repetition, imbalance of power, and intent to cause harm). Siblings were not limited to biological or cohabiting relations, but any young person with at least one biological or legal parent in common. This allowed for the inclusion of various family structures, including foster families. Papers had to be reporting on sibling bullying as an outcome variable or independent variable; papers looking at

sibling bullying as an interaction variable only were not included.

#### 3.4. Types of sources

Included papers must be reporting empirical research; both qualitative and quantitative methodologies were accepted. Meta-analyses and literature reviews were excluded but were scanned to identify any additional sources. Articles that were not available in English were excluded.

#### 3.5. Search strategy

Searches were conducted on PubMed, PsychInfo, Wiley and Web of Science between December 2021 and May 2022. These databases were selected due to their ability to employ Boolean search terms, alongside their coverage of social sciences, and the accessibility for the research team. Additionally, academics in the field of sibling bullying were contacted for any grey literature.

The Boolean search terms were as follows:

sibling(s) OR brother\* OR sister\* OR step\* OR "sibling\* relationship\*"

AND

bull\* OR cyberbull\* OR "online bull\*" OR cyber-bull\* OR "cyber aggression" OR "cyber bull\*" OR "online abuse" OR "online harass\*" OR "online aggress\*" OR "online victim\*" OR "sibling bull\*" OR "sibling aggress\*" OR "sibling abuse" OR harass\* OR conflict OR abus\*

AND

adoles\* OR teen\* OR child\* OR "young\* people"

Once databases were searched, the titles and abstracts of all identified sources were scanned by the first author to establish eligibility against the inclusion and exclusion criteria (stage one), and the remaining papers were then read in their entirety by the same author to identify if they met the inclusion criteria (stage two). Inter-rater reliability checks were conducted by the first and third researcher, which involved 30 papers retained from stage one being randomly selected and blindly assessed for inclusion. Agreement was at 93.3 %, with only one paper differing: upon consideration, this paper was excluded for being too vague with general sibling 'aggression', as opposed to the specification of 'bullying' in this review.

The included papers were screened, and the following information extracted: (a) author(s), (b) date of publication, (c) data of data collection, (d) aims and objectives, I research question, (f) country of study, (g) sample characteristics (e.g., number of participants, age, sex), (h) independent variable(s), (i) dependent variable(s), (j) measure of sibling bullying used, (k) mediating or moderating variables, (l) findings, (m) conclusions. These were then grouped into themes for the insight they provided into sibling bullying.

## 4. Results and discussion

## 4.1. Extraction of results

Fig. 1 illustrates the PRISMA flow-diagram, showing how many sources were retrieved and retained at each stage. The search process initially found 17,278 papers; titles were screened to remove duplicates and any papers that were not on the topic of sibling bullying. 14,919 papers remained, and the titles and abstracts were scanned during stage one; 138 papers were retained for stage two. 45 papers subsequently met the inclusion criteria for this review; the included papers are marked with an asterisk in the reference list.

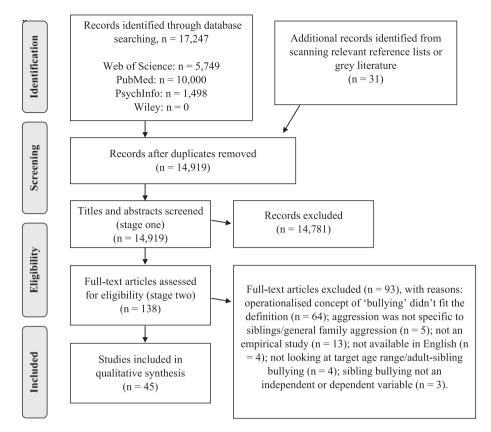


Fig. 1. PRISMA-ScR flow diagram.

#### 4.2. Question 1: What are the characteristics of the studies conducted?

#### 4.2.1. Cultural differences

The 45 included papers were screened to identify specific characteristics; an overview of these papers can be found in Appendix A. Fig. 2 highlights the number of papers per continent. Notably, 36 of the papers (80 %) were from Western countries, with these being disproportionately conducted in the United States ( $n=20,\,44.4\,$ %) and the United Kingdom ( $n=13,\,28.8\,$ %). This is problematic when considering the cultural differences that exist for peer bullying, particularly with regards to prevalence (Kowalski et al., 2014; Nesdale & Naito, 2005; OECD, 2019; Smith & Robinson, 2019); it is unclear whether these differences in prevalence are also found for sibling bullying.

Furthermore, bullying in South-East Asian countries presents differently to many Western countries, both in the way that it is defined, and the types of aggression displayed. In reviewing this, Sittichai and Smith (2015) note that cultural differences in social hierarchy may suggest that older perpetrators are 'legitimate' in their bullying of younger counterparts, which could question the perception of older siblings bullying younger siblings. Likewise, cultural differences exist in the roles that siblings play in the family. For instance, children in some rural and agricultural communities take on culturally defined roles of caregivers for their younger siblings (Sriram & Ganapathy, 1997; Tucker & Updegraff, 2009). It is possible that the existence of sibling bullying would differ in either prevalence or presentation in these cultures. Finally, none of the included literature compared sibling bullying across cultures. It is evident that more research is necessary to map sibling bullying onto other countries and cultures, particularly with respect to non-Western countries.

#### 4.2.2. Publication date

Most of the papers reviewed were published from 2015 onwards (n

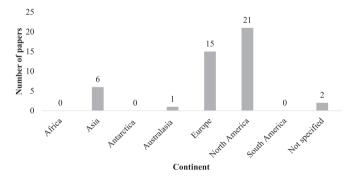


Fig. 2. Number of papers per continent.

= 36, 80 %), as indicated in Fig. 3. Only 24 papers (53.3 %) provided information of when the data was collected, with 16 of these utilising secondary data. Furthermore, two papers examined data from 1976 (Eriksen & Jensen, 2006; Eriksen & Jensen, 2009) creating a 30-year difference between data collection and publication. Date of data collection is important (Smith & Berkkun, 2020). Whilst changes in the number of dependent children living in a household has not substantially changed since 2002 (ONS, 2021), it is possible that other changes in family and social characteristics may impact the risk of sibling bullying. For instance, the COVID-19 pandemic and subsequent lockdowns placed a unique strain on family relationships and dynamics, with Toseeb (2022) reporting an increase in sibling bullying during lockdowns; whilst these findings offer an insight into the impact of a stressful and uncertain period, it is problematic to consider them outside of their temporal context.

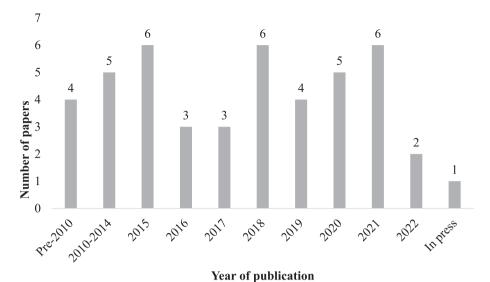


Fig. 3. Number of papers per year of publication.

#### 4.2.3. Measures

The most frequently used tool was an adapted version of the Olweus Bullying Questionnaire (OBQ), in 11 of the studied (24.4 %) of studies. Another 11 studies utilised other pre-established tools, and 15 papers (33.3 %) developed novel measures. A similar issue of varied measurement tools is present in the peer bullying literature. A systematic review by Vivolo-Kantor et al. (2014) found that between 1985 and 2012, 41 different measures of bullying and cyberbullying were created. These authors argued that these inconsistencies hindered the ability to compare prevalence and understanding across studies, which is an issue that is also true in the sibling bullying literature.

When comparing the different measures, some key features emerged. Firstly, most used peer bullying measures that were simply adapted to say 'siblings', with the exception of the Sibling Bullying Questionnaire (SBQ; Linares et al., 2015; Plamondon et al., 2021) and the Sibling Aggression Scale (Deniz et al., 2022). Although many characteristics will be similar between peer and sibling bullying (such as, physical harm), other aspects will inevitably be different: sibling bullying may be harder to escape than that on the playground, and the shared living space may contribute to tensions. Likewise, Campione-Barr (2017) note that power dynamics between siblings are often less stable than those with parents and peers, often changing over time. Whilst this does not question the importance of power in bullying definitions, it should be considered when measuring the phenomenon.

Only one study utilised a measure that included cyberbullying between siblings (Tanrikulu & Campbell, 2015), although it reported an extremely low prevalence of this. The use of technological platforms for family communication is increasing (Zhao et al., 2021), and the findings of Tanrikulu and Campbell (2015) need updating; measures of sibling bullying should include various forms of bullying, including online.

Consistent with the observations by Coyle et al. (2017) and Eriksen and Jensen (2009), there is variation in the terminology applied throughout the included papers. 23 papers labelled the sibling behaviours as 'bullying', whilst 13 used 'aggression', 4 used 'violence', 3 used 'abuse', and 2 used 'conflict'. This is noteworthy as included papers had to fit an operationalised concept of the Olweus (1993) definition of bullying; these papers were all measuring bullying by that definition, but only half of the papers labelled it as such. This lack of agreement in the literature may perpetuate the normalisation of sibling bullying, and agreement in the terminology and measurement tools is vital for future comparison of studies.

#### 4.2.4. Participants

Due to the age specified in the inclusion criteria, all studies investigated sibling bullying for children up to the age of 18-years; nonetheless participants did not need to be in this age category. One study utilised participants under the age of 7, compared to studies looking at those aged 7- to 11-years (n = 9), or 12- to 18-years (n = 21). Meanwhile, nine studies were retrospective, with participants reflecting on experiences during 'childhood', and five used parent respondents. The disparities in participant ages brings about two main concerns: firstly, do children under-7 present sibling bullying in the same way as older children, including the same intention, and secondly does the retrospective perspective hinder the accuracy of the results (Hoetger et al., 2015)? The former concern can be related to the idea that younger children may perceive bullying differently to their older counterparts (Monks & Smith, 2006): it is likely that sibling bullying will also present and be perceived differently, similar to peer bullying. Furthermore, the retrospective accounts considered any sibling bullying that occurred between 0- and 18-years; alongside the clear limitation of recall bias, this wide timeframe calls into question the reliability of the definition and measurement of sibling bullying, which will be explored further when discussing prevalence rates.

A further participant characteristic was gender. A large majority of the included papers adopted mixed-gender samples (n = 43, 95.5 %), but only four of these considered genders beyond biological sex (Martinez & McDonald, 2021; McDonald & Martinez, 2016; Rose et al., 2016; Tanrikulu & Campbell, 2015). Two included studies focused on female-only samples (Corralejo et al., 2018; Martinez & McDonald, 2016). Whilst the gender bias and gender differences will be further considered when questioning who is at risk of sibling bullying, it is still essential to acknowledge the small amount of LGBTQ+ populations included. Individuals belonging to LGBTQ+ groups are substantially more likely to experience peer bullying than heterosexual and cis-gender individuals (Gower et al., 2018; Heino et al., 2021), and this remains true in the sibling bullying literature. Martinez and McDonald (2021) looked into sibling bullying in 31 non-binary and LGBTQ+ individuals and found that cis-gender females and non-binary assigned-female-at-birth participants were more likely to report sibling bullying compared to cisgender males. Moreover, those who were assigned-male-at-birth but presented traditionally feminine characteristics were also at risk of sibling bullying. This is consistent with the peer bullying literature, whereby boys who had older sisters and were less competitive were more likely to be victimised by peers (Okudaira et al., 2015). It is evident that gender does play a role in sibling bullying, but knowledge of the

extent of this is hindered by the lack of diversity in the current literature.

# 4.3. Question 2: What is the prevalence of sibling bullying? How does this compare with peer bullying?

Prevalence was not reported in nineteen papers considered in this review. However, the remaining papers all utilised different criteria and measurement tools, hindering the ability to compare prevalence across studies. A breakdown of the reported prevalence in all papers can be found in Appendix A, but caution must be exercised in drawing conclusions about these figures.

When looking at overall sibling bullying regardless of role, prevalence was reported to vary from 79.1 % to 14 %. Of the 15 studies that also looked at peer bullying, only five compared the prevalence of sibling bullying and peer bullying; four of these reported that sibling bullying occurred more frequently than peer bullying (Dantchev & Wolke, 2019a; Duncan, 1999; Foody et al., 2020; Wolke & Samara, 2004), whilst Bar-Zomer and Brunstein Klomek (2018) argued that peer bullying was slightly more common than that of sibling bullying. These differences, alongside the large variation in the reported prevalence, may be explained by several issues in the definitions and measures of sibling bullying. For instance, the inconsistencies in the timeframe of bullying behaviours set the peer and sibling literature apart. Firstly, the included studies considered any behaviours that occurred during childhood, and no timeframe for involvement was specified; in comparison, many of the measures of peer bullying give a timeframe of victimisation between 7 days or the previous 12 months (Vivolo-Kantor et al., 2014). This was equally visible in the measures used in papers that compared peer and sibling bullying. It is possible that sibling bullying only appears to have a higher prevalence due to the wide timeframe adopted.

Moreover, the Olweus (1993) definition of bullying outlines that behaviours must be repetitive, which can encompass a threatening atmosphere or the occurrence of bullying behaviours on more than one occasion. In the case of sibling bullying, an unfriendly atmosphere may be harder to escape than bullying that occurs at school.

#### 4.4. Question 3: What else do we know about sibling bullying?

The papers were coded into five themes, depending on what topic they provided insight into: predictors (n=23), outcomes (n=23), perceptions (n=3), interventions (n=2), and measures (n=1). Seven papers included both predictors and outcomes. The first five proposed questions fit the theme of predictors.

# 4.4.1. Who is most at risk?

Several predictors were highlighted, including individual characteristics, social risk factors, and sibling constellations.

4.4.1.1. Individual characteristics: Age. Consistent with our understanding of peer bullying, age appeared to predict sibling bullying involvement: overall, younger children were more likely to be involved in sibling bullying, both as a victim and perpetrator (Eriksen & Jensen, 2006; Liu et al., 2021; Tippett & Wolke, 2015; Tucker et al., 2013). Only one research study attempted to predict the peak of sibling bullying, with this occurring prior to adolescence (Tucker et al., 2013). This somewhat differs from the peak age of peer bullying, which tends to be around 11- to 14-years for traditional bullying (Eslea & Rees, 2001) and 15-years for cyberbullying (Tokunaga, 2010). As only one study has explored this in sibling bullying, it is difficult to accurately predict the peak of this issue compared to peer bullying. Meanwhile, age in sibling bullying plays a complex role, as the age of the other siblings is often different: siblings closer in age were more likely to experience bullying (Tucker et al., 2013), with first-born children being more likely to perpetrate (Dantchev & Wolke, 2019a; Toseeb, McChesney, Dantchev, &

Wolke, 2020). This may be reflective of an assumed power imbalance, with first-born children holding greater social power, but with some conflicting needs in closer aged siblings.

4.4.1.2. Individual characteristics: Gender. It is well-understood in peer bullying that gender impacts the role and type of bullying behaviours (Smith, 2016), but this has not been replicated in the sibling bullying literature. Boys are significantly more likely to be involved in sibling bullying, especially as perpetrators (Dantchev & Wolke, 2019a; Eriksen & Jensen, 2006; Eriksen & Jensen, 2009; Menesini et al., 2010; Tippett & Wolke, 2015; Tucker et al., 2013). Although this has not specifically been considered in the existing sibling bullying literature, it is possible that gender-specific roles in peer bullying may also influence those involved in sibling bullying. For instance, girls are typically more likely to engage in relational, indirect, or cyberbullying (Barlett & Coyne, 2014). Yet within a family setting, these forms of bullying may be less common, especially that of cyberbullying. Thus, it is possible that physical bullying is more common between brothers; it would be beneficial for research to consider the specific forms of bullying and gender differences, with acknowledgement of all possible gender constellations.

Related to gender identity, there was a potentially mixed picture for individuals who identified as LGBTQ+. Overall, they were not more likely to experience sibling bullying, unlike what is seen in peer bullying (Berlan et al., 2010), however two studies reported LGB females experiencing victimisation at the hands of their brothers (Martinez & McDonald, 2016, 2021).

4.4.1.3. Individual characteristics: Psychological. Only two papers considered psychological factors as a risk for sibling bullying. Tanrikulu and Campbell (2015) found that perpetrators of sibling bullying scored significantly higher on trait anger and moral disengagement measures, whilst Toseeb, McChesney, Dantchev, and Wolke (2020) reported that perpetrators had higher emotional dysregulation. Although additional research to corroborate these findings is needed, these do offer an initial insight into characteristics of sibling bullying perpetrators.

4.4.1.4. Individual characteristics: Disabilities and special educational needs (SEN). The included papers found mixed results surrounding the risk that disability or SEN poses; three papers suggested that these increased the risk of sibling bullying (Toseeb et al., 2018; Toseeb, McChesney, Oldfield, & Wolke, 2020; Tucker et al., 2017), whilst three found contrasting results (Rose et al., 2016; Toseeb, 2022; Tucker et al., 2017). For instance, children who had a physical disability were significantly more likely to be victimised by their siblings (Tucker et al., 2017), whilst children with autism spectrum disorder (ASD) were also at an increased risk of involvement (Toseeb et al., 2018; Toseeb, McChesney, Oldfield, & Wolke, 2020). On the other hand, it was perceived that disabilities were protective against sibling bullying due to increased parental intervention (Toseeb, 2022). Finally, Rose et al. (2016) and Tucker et al. (2017) found evidence that some, but not all, disabilities were protective against sibling bullying; this emphasises the complexity of this predictor in sibling bullying, and the need for clearer understanding of how disability may or may not pose a risk.

4.4.1.5. Interpersonal relationships. This factor can be subdivided into the social relationships inside and outside of the home. Perhaps unsurprisingly, a majority of the papers that explored social factors focused on those within the home: four papers found evidence that harsh parenting increased the risk of sibling bullying (Kim & Kim, 2019; Martinez & McDonald, 2021; Tippett & Wolke, 2015; Toseeb et al., 2018), which is suggestive of poor child-parent relationships (Nocentini et al., 2019). Relatedly, experiencing parent-child violence or witnessing parent-parent violence was associated with increased sibling bullying perpetration and victimisation (Eriksen & Jensen, 2006; Ingram et al., 2020;

Plamondon et al., 2021). Consistent with social learning theory, this could be indicative of learned behaviours whereby violence is deemed an appropriate response (Bandura, 1978; Nocentini et al., 2019), meanwhile Chen et al. (2018) noted that aggression within the family can teach children to internalise themselves as a victim, which subsequently increases their risk of further victimisation. Alongside this, sibling rivalry has been associated with greater sibling bullying (Plamondon et al., 2021).

Aside from family relationships, school relationships have been linked to sibling bullying. Menesini et al. (2010) and Valido et al. (2021) noted that children involved in peer bullying were significantly more likely to be involved in sibling bullying, both within- and betweengroups, proposing that peer relationships have some impact on those with siblings. Moreover, Rose et al. (2016) and Valido et al. (2021) found a buffering effect of school belonging, with greater school belonging reducing both peer and sibling bullying; this could suggest that positive social relations are protective against victimisation at home and school. Ultimately, the existing literature provides an initial insight into the ways that family and school relationships may be related to sibling bullying, but the exact reasons for this are yet to be established.

# 4.4.2. Does the 'type' of sibling (biological, half-, step-, adopted, foster)

Only one paper considered the impact of sibling type: Tanskanen et al. (2017) looked at sibling bullying between full- and half-siblings in the UK using the Millennium Cohort Study (MCS). Sibling bullying was reportedly higher in full siblings, compared to half-siblings. Steinbach and Hank (2018) found evidence that whilst full-siblings tend to report more positive relationships than half- or step-siblings, they also report increased conflict; the authors suggest that this is a result of increased contact throughout development. Ultimately, this further emphasises the constraint of timeframe in the definitions, with full-siblings potentially having an increased period to consider sibling bullying. On the other hand, Tanskanen et al. (2017) argue that demands on parental resources are responsible for these differences, with full-siblings having to share parental resources, whilst half-siblings each have an individual parent to rely on. It could be hypothesised that other sibling types would also display lower rates of sibling bullying compared to full siblings, such as adopted or foster siblings and step-siblings, due to the existence of other parents or 'sources of supplies'. Yet, these children are likely to have experienced disruption and instability in the family home, and thus may be more at risk of sibling bullying. This emphasises a core limitation in the study by Tanskanen et al. (2017), in that half-siblings were only included if they were living with their biological mother and a stepfather; it is possible that dynamics would change in households with a biological father and step-mother, or a single parent household. Furthermore, when applying Volk et al. (2016)'s Evolutionary Perspective of bullying to the sibling literature, it could be assumed that children without a genetic 'investment' – those who are less genetically related - would be more inclined to perpetrate sibling bullying. It is possible that this would be outweighed by the concept of shared parental resources (Tanskanen et al., 2017), but this is difficult to conclude from only one study.

#### 4.4.3. Does family structure play a role?

As stated previously, limited research has been conducted with regards to alternate family types. Research has suggested that families considering divorce may experience greater peer bullying (Eriksen & Jensen, 2006), but this could be a result of relationships within the family: as mentioned, positive sibling relationships are protective against many difficulties (Tippett & Wolke, 2015; Wolke & Skew, 2012), which extends to relationships in the wider family unit (Bai et al., 2020; Buelga et al., 2017). Further research is needed to understand the existence of sibling bullying in alternative family structures, with specific attention to non-biological siblings, including step-, adopted- and foster-siblings.

4.4.4. Do any other family-based factors play a role, such as socioeconomic status (SES), religion, education, or birth order?

Previous research has identified a positive correlation between religiosity and greater bullying involvement, with religious children often finding themselves victimised for their contrasting beliefs (Schihalejev et al., 2020). If these beliefs are responsible for some level of bullying, then it would be logical to assume that siblings who share a religious background may be less involved in sibling bullying, but this has not been supported in the literature. Eriksen and Jensen (2006) reported that families with a strong religious background have a greater risk of sibling bullying. This has been expanded on by McCormick and Krieger (2020), who suggest that bullying within the family unit may be due to a sense of moral obligation to 'correct' children who are perceived as morally deviant.

Furthermore, wealth and education have been found to have a linear relationship with sibling bullying, with poverty acting as a risk factor (Liu et al., 2021; Tippett & Wolke, 2015). It is possible that this is related to parental resources, with an increased tension between children resulting from demands on parents. Likewise, those living in wealthier families are more likely to have large, less-crowded living conditions, providing the opportunity for personal space when tensions arise.

Finally, a consistent link has been established between parental characteristics and sibling bullying. In particular, harsh parenting (Tippett & Wolke, 2015) and having violent parents (Eriksen & Jensen, 2006; Ingram et al., 2020; Plamondon et al., 2021; Toseeb et al., 2018; Toseeb, McChesney, Dantchev, & Wolke, 2020) increases the risk of bullying between siblings; this is consistent with current understandings of peer bullying, with children learning violence from role models.

#### 4.4.5. Are the findings consistent in different cultures?

As previously discussed, the included papers lacked cultural diversity, with 80 % of the papers being from Western countries; it is thus unclear whether there is an increased risk associated with certain cultures. However, aside from the geographical cultures are those shared between racial and ethnic groups (Xu et al., 2020). Two studies found evidence that white children are disproportionately more likely to be involved in sibling bullying compared to 'non-whites' (Eriksen & Jensen, 2009) or blacks and Hispanics (Tucker et al., 2013), highlighting an ethnic risk for involvement. The reasons for this are unclear, which corroborates the need for more research across different racial and ethnic groups. Nonetheless, a review by Xu et al. (2020) has suggested that ethnic minority groups may underreport bullying victimisation in an attempt to not 'identify' with this label; this could expand into sibling bullying and family perceptions of victimisation.

### 4.4.6. What is the impact of sibling bullying?

Outcomes of sibling bullying were divided into mental wellbeing, social wellbeing, delinquent behaviours, and peer bullying involvement. When considering the potential impact on mental wellbeing, a majority of the included papers found evidence that sibling bullying had a negative influence on mental health for both victims and perpetrators; involvement increased the risk of anxiety (Bowes et al., 2014; Coyle et al., 2017; Fite et al., 2021; Liu et al., 2020), depression (Bar-Zomer & Brunstein Klomek, 2018; Bowes et al., 2014; Dantchev et al., 2018; Dantchev et al., 2019; Fite et al., 2021; Liu et al., 2020), low self-esteem (Deniz & Toseeb, 2023 in press; Plamondon et al., 2021; Toseeb & Wolke, 2021), self-harming behaviours (Bowes et al., 2014); and suicidal ideation (Bar-Zomer & Brunstein Klomek, 2018; Dantchev et al., 2019). Other studies reported general difficulties with internalising issues, lowered general wellbeing, and poor emotional regulation (Coyle et al., 2017; Deniz & Toseeb, in press; Mathis & Mueller, 2015; Plamondon et al., 2021; Toseeb et al., 2018; Tucker et al., 2015). A doseresponse was found for these outcomes whereby increased sibling bullying led to poorer outcomes (Liu et al., 2020; Toseeb & Wolke, 2021), and these were not moderated by gender or age (Mathis & Mueller, 2015). Interestingly, the implications for mental wellbeing

were not specific for perpetrators or victims.

These outcomes are similar to those of peer bullying, yet Coyle et al. (2017) found evidence that the detrimental outcomes for sibling bullying were worse than those seen in peer bullying. Conversely, another study found no significant outcomes of sibling bullying on mental health or wellbeing: Mackey et al. (2010) did not find a relationship between self-reported victimisation and depression or anxiety in adulthood. However, it must be noted that the retrospective design may have caused an over-reporting of sibling bullying: 83 % of respondents reported experiencing severe emotional victimisation from siblings, and 56 % reported severe physical victimisation. It is possible that these prevalence rates are impacted by recall bias.

Moreover, sibling bullying was associated with social issues, including increased loneliness (Duncan, 1999), and poorer attachments to friends and parents (Bar-Zomer & Brunstein Klomek, 2018; Kim & Kim, 2019); whether or not these were perpetrators or victims of sibling bullying was not specified. From here – and as previously discussed – it is perhaps predictable that many of those involved in sibling bullying report subsequent involvement in peer bullying (Bowes et al., 2014; Foody et al., 2020; Kim & Kim, 2019; Morrill et al., 2018). Furthermore, this was not moderated by gender (Kim & Kim, 2019).

A final reported outcome was delinquent behaviours. Whilst Dantchev et al. (2018) noted that victims of sibling bullying were nearly three times more likely to be dependent on nicotine in adulthood, Ingram et al. (2020) and Tucker et al. (2015) found that perpetrators of sibling bullying were at an increased risk of substance abuse, and other delinquent behaviours such as skipping school and carrying a weapon. These remained when SES, gender and age were controlled.

Overall, the identified research almost unanimously agreed that sibling bullying has detrimental outcomes for those involved. This emphasises the importance of addressing this issue properly.

#### 5. Practical recommendations

The existing literature has offered useful insights into what factors may predict sibling bullying and the impact that this can have, but there are still large gaps in our understanding. First and foremost, the disagreements between terminology and measurement tools must be settled; without this, cross-comparison is difficult and reliable conclusions cannot be formed. We suggest that measures should include all forms of bullying behaviours - including cyberbullying - and must account for dynamics that would only exist for siblings, such as sharing living spaces, and the role of parents. Secondly, researchers should continue to try and understand the prevalence rates of sibling bullying. Alongside consistency in measurement tools, the literature would benefit from consistency timeframes of sibling bullying, and a clear definition of bullying provided to participants. This field would benefit from cross-cultural analyses, with attention to sibling bullying across different cultures; tools should pay attention to different family roles and differences in definitions.

Understanding how sibling bullying is perceived is also an important issue: perceptions will influence the normalisation of sibling bullying, which may increase the prevalence, as well as how stakeholders

approach intervention programmes. For instance, McDonald and Martinez (2016) and Meyers (2014) looked at how victims of sibling bullying perceived adult responses, and both found reports of minimisation and favouritism. Future research should explore how different stakeholders perceive sibling bullying.

Finally, limited research has endeavoured to implement interventions to reduce sibling bullying: only two studies investigated potential ways to address sibling bullying, both on very young samples (Corralejo et al., 2018; Linares et al., 2015). The previous research has established that this is a realistic concern with serious consequence; attempts must be made to intervene with sibling bullying, as well as prevent future cases.

#### 6. Limitations and implications

This review was particularly limited by the search methods used: first, searches were only conducted in English, and papers in other languages were not included. This may have resulted in the omission of papers that met the inclusion criteria; a cultural bias was found in the results of this review, and it is possible that this is influenced by the language inclusion criteria implemented. Similarly, this review only utilised four databases (PubMed, PsychInfo, Wiley, and Web of Science), which may have limited the papers included. Regardless, the inclusion of grey literature is a considerable strength in this review.

However, this scoping review has provided an original and concise insight into what we currently understand about sibling bullying, and what more is needed. This is an emerging topic within the wider bullying literature and could have implications for peer bullying and better understanding the role of siblings in child development.

#### 7. Conclusions

The literature identified in this scoping review offers some useful insights into sibling bullying, and particularly the risk and protective factors surrounding this phenomenon. Nonetheless, these are only the beginning in terms of understanding the bullying that occurs between siblings. The existing literature fails to address several theoretical and methodological concerns, alongside providing limited explanations for why certain children may be vulnerable. In developing successful prevention and interventions, researchers should carefully consider the use of terminology, definitions and measurement tools to assess the prevalence of sibling bullying. Cross-cultural research is imperative in this field, and this should be considered in the context of both biological and non-biological family structures.

# Declaration of competing interest

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

# Data availability

No data was used for the research described in the article.

Appendix A. Appendices
Appendix A

Overview of included studies.

| Author(s)                          | Date<br>published | Date<br>conducted | Country | Hypotheses / research question  | Participant<br>characteristics | Measure of sibling bullying | Findings  | Theme    |
|------------------------------------|-------------------|-------------------|---------|---|--------------------------------|-----------------------------|---|----------|
| Bar-Zomer &<br>Brunstein<br>Klomek | 2018              | – Israel          |         | Depression and suicidal ideation will be higher for those involved in SB. | N = 279<br>Ages 10–17          | TBQ                         | SB increased the risk of<br>suicide by 2.3 times,<br>depression by 3.7, and | Outcomes |
|                                    |                   |                   | Israel  |   |                                | Terminology:<br>Bullying    |   |          |

(continued on next page)

# Appendix A (continued)

| Author(s)           | Date<br>published | Date<br>conducted               | Country | Hypotheses / research question   | Participant<br>characteristics         | Measure of<br>sibling bullying    | Findings   | Theme                  |
|---------------------|-------------------|---------------------------------|---------|--|--|-----------------------------------|--|------------------------|
|                     |                   |                                 |         |  |  |                                   | insecure attachments to parents.   |                        |
|                     |                   |                                 |         | CD duming shildhead suill  | N = 3452                               | OBQ                               | SB increased the risk of peer  |                        |
| Bowes et al.        | 2014              | 2003/4 and                      | UK      | SB during childhood will increased depression,                                       | Longitudinal: T1 –                     |                                   | bullying. SB linked to higher  | Outcomes               |
| owes et al.         | 2014              | 2009/10                         | OK .    | anxiety and self-harm at 18.   | age 12, T2 – age<br>18                 | Terminology:<br>Bullying<br>Coded | rates of depression, self-<br>harm, and anxiety.   | Outcomes               |
|                     |                   |                                 |         | What is the shortest   | N = 4 families                         | observation                       | One minute of time out is  |                        |
| orralejo<br>et al.  | 2018              | -                               | -       | duration of 'time out' to reduce SB?   | Children aged 3–7<br>All females       | Terminology: Aggression           | sufficient for reducing SB in young children.  | Interventio            |
|                     |                   |                                 |         |  |  | OBQ                               | SB was independently   |                        |
| oyle et al.         | 2017              | -                               | USA     | Does SB predict issues above peer bullying?  | N = 372Ages 9–12                       | Terminology:<br>Bullying          | related to internalising issues above those of peer bullying.  | Outcomes               |
|                     |                   |                                 |         |  |  |                                   | Bully-victims were 2 times   |                        |
| antchev             |                   | 2003/04;                        |         | Are different roles  | N = 3881                               | OBQ                               | more likely to be depressed  |                        |
| et al.              | 2019              | 2009/10;                        | UK      | associated with different  | Longitudinal                           | Terminology:                      | at age 24. All SB  | Outcomes               |
|                     |                   | 2015/16                         |         | outcomes?  | Aged 12 and 24                         | Bullying<br>OBQ                   | involvement was linked to<br>suicidal ideation.<br>Having more siblings, older                       |                        |
| antchev &           |                   |                                 |         | What family characteristics  | N = 6838                               | ОВQ                               | brothers, or being the first   |                        |
| Wolke               | 2019a             | 2003/04                         | UK      | predict SB?  | Aged 12                                | Terminology:<br>Bullying          | born all increased the risk of involvement.  | Predictors             |
|                     |                   | 2002 (04)                       |         |  | N = 6988                               | OBQ                               | SB victims were 3 times  |                        |
| Dantchev &<br>Wolke | 2019b             | 2003/04;<br>2009/10;<br>2011/12 | UK      | SB will be linked to high-<br>risk behaviours.                                       | Longitudinal<br>Aged 12, 18, and<br>20 | Terminology:<br>Bullying          | more likely to smoke, and<br>1.5 times more likely to<br>engage in high-risk                         | Outcomes               |
|                     |                   |                                 |         |  |  |                                   | behaviours.<br>SB victims were 3 times   |                        |
| Dantchev            |                   | 2003/04;                        |         | SB bully-victims will have   | N = 6988                               | OBQ                               | more likely to have  |                        |
| et al.              | 2018              | 2009/10                         | UK      | the highest rates of psychotic disorders.  | Longitudinal<br>Aged 12 and 18         | Terminology:<br>Bullying          | psychiatric difficulties in later life.  | Outcomes               |
|                     |                   |                                 |         | Is the SBQ a reliable and  | N = 301                                | SBQ                               | Good internal consistency  | Measure/               |
| eniz et al.         | 2022              | -                               | Turkey  | valid measure on Turkish populations?  | Aged 10–18                             | Terminology:<br>Bullying          | and high convergent validity of the SBQ.   | tool                   |
|                     |                   |                                 |         | SB will be linked to higher  | N = 416                                | 16                                |  |                        |
| Deniz &             |                   |                                 |         | internalising and<br>externalising issues; SB will                                   | Adolescents with                       | Novel for MCS                     | SB reduced self-esteem,  |                        |
| Toseeb              | In press          | -                               | UK      | also be linked to lower self-<br>esteem; self-esteem will                            | ASD<br>Aged 11, 14, and<br>17.         | Terminology:<br>Bullying          | which in turn reduced mental wellbeing.  | Outcomes               |
|                     |                   |                                 |         | mediate the link.  |  | PRQ                               | SB was linked to peer  |                        |
| Ouncan              | 1999              | _                               | USA     | Utilising a new tool to assess TB and SB.  | N = 375<br>Mean age = 13.35            | Terminology:                      | bullying and resulted in<br>poorer mental wellbeing  | Outcomes               |
|                     |                   |                                 |         |  |  | Bullying                          | and increased loneliness.  |                        |
|                     |                   |                                 |         |  | N = 994 married                        | CTS                               | Younger children and males   |                        |
| riksen &<br>Jensen  | 2006              | 1976                            | USA     | What family characteristics predict SB?  | couples with 2+<br>children aged       | Terminology:                      | were more likely to be violent towards siblings, as  | Predictors             |
| beliseir            |                   |                                 |         | predict ob.  | 0-17 $N = 994  married$                | Violence<br>CTS                   | well as those in 'unhappy' families.   |                        |
| Eriksen &           | 2000              | 1077                            | 116.    | How does the severity of SB  | N = 994 married couples with $2+$      | G10                               | Males and white children   | D 11 :                 |
| Jensen              | 2009              | 1976                            | USA     | differ for predictors?   | children aged<br>0–17                  | Terminology:<br>Violence          | were more likely to be severe perpetrators.  | Predictors             |
|                     |                   |                                 |         | Proactive and reactive bullying will be higher for                                   |  | P/RAS                             | Both proactive and reactive  |                        |
| ite et al.          | 2021              | -                               | USA     | siblings than peers and will<br>lead to higher anxiety and                           | N = 321Aged 7–11                       | Terminology:                      | SB increased risk of depression and anxiety.   | Outcomes               |
|                     |                   |                                 |         | depression.  |  | Aggression<br>OBQ                 |  |                        |
| loody at al         | 2020              |                                 | Ireland | How does polyvictimisation   | N = 2247                               |                                   | SB increases the risk of peer  | Outcome                |
| oody et al.         | 2020              | _                               | Ireland | lead to depression and negative behaviours?  | Aged 12–15                             | Terminology:<br>Bullying          | bullying involvement   | Outcomes               |
|                     |                   |                                 |         | SB will be viewed as a   | N = 392                                | IBS                               | Participants reported<br>greater involvement in SB   |                        |
| loetger et al.      | 2015              | -                               | USA     | normative experience and will be under-reported                                      | Mean age = 19.09<br>Retrospective      | Terminology:<br>Bullying          | than peer bullying. Less<br>than half perceived it as<br>bullying and were less likely<br>to report. | Perceptions            |
|                     |                   |                                 |         | There will be two distinct   |  | IBS                               | Family violence predicted  |                        |
| ngram et al.        | 2020              | 2008/09<br>and 2012             | USA     | profiles for predicting peer<br>bullying and SB. Family<br>violence will predict SB. | N = 894<br>T1 grades 5–7               | Terminology: Aggression           | SB, as well as peer bullying. Those involved in SB and   | Predictors of Outcomes |

# Appendix A (continued)

| Author(s)               | Date<br>published | Date<br>conducted | Country   | Hypotheses / research question  | Participant<br>characteristics  | Measure of sibling bullying  | Findings   | Theme                    |
|-------------------------|-------------------|-------------------|-----------|---|---|--|--|--------------------------|
| Kim & Kim               | 2019              | -                 | Korea     | How does parenting style impact SB?   | N = 584<br>Aged 9–12  | OBQ<br><i>Terminology:</i><br>Bullying   | peer bullying displayed the<br>most negative behaviours.<br>Rejecting parenting<br>increased SB and peer<br>bullying. Poorer friendship<br>quality increased SB. No<br>gender differences. | Predictors &<br>Outcomes |
| Linares et al.          | 2015              | -                 | USA       | Will parental mediation aid conflict resolution?  | <ul><li>N = 44 (22 sibling pairs).</li><li>Aged 5–11, living in foster care with a biological sibling</li></ul> | SAS  Terminology: Aggression   | The intervention successfully improved positive interactions and reduced SB.   | Intervention             |
| Liu et al.              | 2020              | 2018              | China     | To explore SB in a Chinese sample.  | N = 5926<br>Aged 10–18  | OBQ  Terminology: Bullying   | SB increased the risk of depression and anxiety, but this depended on the role and frequency.  | Outcomes                 |
| Liu et al.              | 2021              | -                 | China     | How do psychotic experiences relate to SB?  | N = 3231<br>Aged 11–16  | OBQ  Terminology: Bullying   | SB was linked to higher rates of psychotic experiences.  | Predictors &<br>Outcomes |
| Mackey et al.           | 2010              | -                 | USA       | Does sibling rivalry and conflict moderate the link between SB and depression/anxiety?                                      | N = 144<br>Aged 18+<br>Retrospective  | CTS  Terminology: Abuse  | There was no significant correlation between SB and mental illness.  | Outcomes                 |
| Martinez &<br>McDonald  | 2016              | -                 | USA       | How do LGBT groups experience SB?   | N = 64 cis women<br>Aged $18+$<br>Retrospective   | Novel to this  Terminology: Aggression   | No significant differences<br>for LGBT experiences of SB;<br>brothers were more likely to<br>perpetrate against LGB<br>sisters.  | Predictors               |
| Martinez &<br>McDonald  | 2021              | 2018–19           | USA       | How do LGBT groups experience SB?   | N = 31 LGBTQ+<br>Aged 18+<br>Retrospective  | Novel to this  Terminology:  Violence  | Transgender and non-<br>binary individuals had the<br>poorest family<br>relationships; women were<br>most at risk for SB.  | Predictors               |
| Mathis &<br>Mueller     | 2015              | -                 | -         | The relationship between SB and adult aggression will be highest for men, and emotional outcomes will be highest for women. | N = 322<br>Mean age = 22.83<br>Retrospective  | CTS  Terminology: Aggression   | SB led to emotional difficulties in adulthood, but this was not moderated by gender.   | Outcomes                 |
| McDonald &<br>Martinez  | 2016              | 2012–2013         | USA       | How did adults respond to sibling bullying during childhood?  | N = 20 Aged 18+ Retrospective   | Thematic<br>analysis coding<br>developed for<br>this<br>Terminology:<br>Violence | 12/20 reported that adults took sibling bullying seriously, but 9/20 experienced minimisation. Parental responses impacted wellbeing.  | Perceptions              |
| Menesini<br>et al.      | 2010              | -                 | Italy     | Older children and boys will be more involved.  | N = 195<br>Aged 10–12   | BVQ  Terminology: Bullying Narrative   | Males bullied siblings the<br>most. Low empathy<br>increased SB, and increased<br>peer bullying.   | Predictors               |
| Meyers                  | 2014              | -                 | USA       | How do adults perceive their childhood experiences of SB?   | N = 19<br>Aged 25–65<br>Retrospective   | analysis coding<br>developed for<br>this<br>Terminology:<br>Abuse                | SB typically started between<br>the age of 3–11.<br>Parents often responded<br>'badly', favouring one child.   | Perceptions              |
| Morrill et al.          | 2018              | -                 | USA       | SB will be linked to greater involvement in peer bullying.  | N = 81<br>Aged 22–58<br>Retrospective   | CTS  Terminology: Abuse  | SB was linked to peer<br>bullying involvement as<br>both a perpetrator and<br>victim.  | Outcomes                 |
| Plamondon<br>et al.     | 2021              | -                 | Canada    | Negative family dynamics will be linked to greater SB, and poorer wellbeing.  | N = 216<br>Mean age = 19.01<br>Retrospective  | SBQ  Terminology: Bullying   | Parental hostility and<br>sibling rivalry predicted SB.<br>SB reduced overall<br>wellbeing.  | Predictors &<br>Outcomes |
| Rose et al.             | 2016              | -                 | USA       | How do disabilities and school-belonging impact SB?   | N = 14,508<br>n = 1183 with disabilities<br>Mean age: 14.4  | IBS  Terminology: Aggression   | Disability did not predict<br>higher SB but reduced it.<br>School belonging did not<br>directly impact SB, but<br>indirectly.  | Predictors               |
| Tanrikulu &<br>Campbell | 2015              | 2012              | Australia | What predicts physical and online SB?   | N = 455<br>Aged 11–17   | S-TB&CBQ  Terminology: Bullying  | Cyberbullying between siblings was very low. Trait anger increased SB.   | Predictors               |

(continued on next page)

### Appendix A (continued)

| Author(s)             | Date<br>published | Date<br>conducted | Country | Hypotheses / research question   | Participant<br>characteristics  | Measure of sibling bullying                             | Findings  | Theme                    |
|-----------------------|-------------------|-------------------|---------|--|---|---|---|--------------------------|
|                       |                   |                   |         |  |   | Novel to MCS  |   |                          |
| Tanskanen<br>et al.   | 2017              | 2012/13           | UK      | How does household composition predict SB?   | N = 7527<br>Aged 11   | Terminology:<br>Conflict                                | Full biological siblings had higher rates of SB.  | Predictors               |
| Tippett &<br>Wolke    | 2015              | 2009/10           | UK      | What home characteristics predict SB?  | N = 4237<br>Aged 10–15  | Novel  Terminology: Aggression                          | Gender, age, poverty, and family characteristics all predicted SB.  | Predictors               |
| Toseeb                | 2022              | 2020              | UK      | How did the COVID-19 pandemic and lockdown impact SB?  | N = 504 parents<br>with children with<br>special<br>educational needs<br>(SEND)   | Novel  Terminology: Conflict                            | SB increased during the<br>lockdown and decreased<br>after. Children with SENDs<br>were protected from SB.  | Predictors               |
| Toseeb et al.         | 2020a             | 2011–19           | UK      | SB at age 11 will be linked to poorer mental health at age 17.   | N = 17,152<br>Longitudinal aged 11, 14 and 17                                     | Novel to MCS  Terminology: Bullying                     | Involvement in SB as either<br>a victim or bully-victim was<br>linked to poorer mental<br>health. A dose-response was   | Outcomes                 |
| Toseeb et al.         | 2020b             | 2014              | UK      | How does SB change<br>between the ages of 11 and<br>14, and what are the<br>longitudinal psychosocial<br>outcomes? | N = 8411<br>All with ASD<br>Aged 11 and 14<br>(longitudinal)                      | Developed for<br>MCS<br>Terminology:<br>Bullying        | observed. Children with ASD were more likely to be involved in SB and peer bullying. SB was linked to various psychosocial difficulties. Having ASD, being female,  | Predictors &<br>Outcomes |
| Toseeb et al.         | 2018              | 2005–2013         | UK      | Children with ASD will experience greater SB.  | N = 14,177<br>Ages 5, 7, and 11<br>(longitudinal)                                 | Developed for<br>MCS<br><i>Terminology:</i><br>Bullying | being white, harsh<br>parenting, and having more<br>siblings increased the risk of<br>SB. Children with ASD were<br>more likely to be bully-<br>victims and displayed more<br>emotional difficulties and<br>lower prosocial skills. | Predictors &<br>Outcomes |
| Toseeb &<br>Wolke     | 2021              | 2007/11           | UK      | What precursors are there for SB?  | N = 16,987<br>Aged 7–11<br>(longitudinal)   | Novel to MCS  Terminology: Bullying JVQ                 | Structural family characteristics were the strongest predictors of SB.  | Predictors               |
| Tucker et al.         | 2013              | 2008              | USA     | What predicts SB?  | N = 1705<br>Aged 0–17   | Terminology: Aggression JVQ                             | Gender, ethnicity, and age constellations predicted SB.   | Predictors               |
| Tucker et al.         | 2017              | 2011              | USA     | Does disability or weight increase SB victimisation?   | N = 780<br>Aged 2–9   | Terminology: Aggression                                 | Disabilities and weight predicted SB.   | Predictors               |
| Tucker et al.         | 2015              | 2008              | USA     | Proactive and reactive aggression will be linked to adjustment.  | N = 356<br>7th graders and<br>11th graders, and<br>then a year later<br>follow-up | RPQ Terminology: Aggression                             | Proactive aggression was<br>linked to increased<br>substance abuse and<br>delinquency, whilst reactive<br>was linked to increased<br>depression and<br>delinquency.   | Outcomes                 |
| Valido et al.         | 2021              | 2008/9            | USA     | How does family violence impact SB, and does school belonging moderate this?                                       | N = 1611 Mean age = 12.7  | Novel (surveyed at 4 points)  Terminology: Aggression   | Family violence predicted<br>peer bullying and SB, and<br>school belonging moderated<br>this.   | Predictors               |
| Walters &<br>Espelage | 2020              | -                 | USA     | How does hostility, anger<br>and dominance mediate the<br>SB-peer bullying<br>relationship?                        | N = 713<br>Aged 10–15   | Novel  Terminology: Aggression                          | Hostile biases mediated the relationship between SB and peer bullying.  | Predictors               |
| Wolke &<br>Samara     | 2004              | -                 | Israel  | What is the overlap in peer bullying and SB in an Israeli population?  | N = 921<br>Aged 12–15   | OBQ  Terminology: Bullying                              | There was an overlap<br>between peer bullying and<br>SB. Poor social relationships<br>increased the risk of SB.   | Predictors &<br>Outcomes |

Note. SB = Sibling bullying. Measures: BVQ = Bullying Victimisation Scale; CTS = Conflict Tactic Scale; CTS = Illinois Bullying Scale; CTS = Illinois Bully

#### Appendix B

Reported prevalence rates of sibling bullying.

| Author(s) and Date of Publication        | Prevalence of sibling bullying  |
|--|---|
| Bar-Zomer and Brunstein Klomek<br>(2018) | 30.8 % total involvement, regardless of role  |
| Bowes et al. (2014)                      | 30.3 % total victimisation, regardless of role  |
| Corralejo et al. (2018)                  | No prevalence reported  |
| Coyle et al. (2017)                      | No prevalence reported  |
| Dantchev and Wolke (2019a)               | 28.1 % total involvement, regardless of role  |
| Dantchev and Wolke (2019b)               | 7.1 % perpetration, 9.7 % victimisation, 11.3 % bully-victim (28.1 % overall)   |
| Dantchev et al. (2018)                   | 7.1 % perpetration, 9.7 % victimisation, 11.3 % bully-victim (28.1 % overall)   |
| Dantchev et al. (2019)                   | 31.2 % total involvement, regardless of role  |
| Deniz & Toseeb (2023 In press)           | 53 % of early adolescents with ASD victims, and 40 % perpetrators; 30 % of mid-adolescents with ASD victims, and 24 % perpetrators            |
| Deniz et al. (2022)                      | 51 % total involvement, regardless of role  |
| Duncan (1999)                            | 29.9 % victimisation  |
| Eriksen and Jensen (2006)                | No prevalence reported  |
| Eriksen and Jensen (2009)                | 79.1 % minor sibling bullying (hitting, kicking, low injury), and 14 % severe (using weapons)   |
| Fite et al. (2021)                       | No prevalence reported  |
| Foody et al. (2020)                      | 3.2 % perpetration, 13.2 % victimisation, 15.4 % bully-victim   |
| Hoetger et al. (2015)                    | No prevalence reported  |
| Ingram et al. (2020)                     | No prevalence reported  |
| Kim and Kim (2019)                       | No prevalence reported  |
| Linares et al. (2015)                    | No prevalence reported  |
| Liu et al. (2020)                        | 20.8 % victimisation  |
| Liu et al. (2021)                        | 10.8 % perpetration, 12.9 % victimisation   |
| Mackey et al. (2010)                     | Emotional bullying: perpetration – 97 % minor and 80 % severe; victimisation – 97 % minor and 83 % severe                                     |
|  | Physical bullying: perpetration – 82 % minor and 53 % severe; victimisation – 83 % minor and 56 % severe                                      |
| Martinez and McDonald (2016)             | Victimisation of LGBTQ siblings: 77.8 % verbal abuse, 80 % physical abuse, and 66.7 % sexual abuse  |
| Martinez and McDonald (2021)             | 82.99 % total involvement for LGBT siblings, regardless of role   |
| Mathis and Mueller (2015)                | No prevalence reported  |
| McDonald and Martinez (2016)             | No prevalence reported  |
| Menesini et al. (2010)                   | No prevalence reported  |
| Meyers (2014)                            | No prevalence reported  |
| Morrill et al. (2018)                    | No prevalence reported  |
| Plamondon et al. (2021)                  | 27.8 % total involvement, inclusive of frequencies from once/twice to several times a week  |
| Rose et al. (2016)                       | $12.9\ \%$ of those with disabilities perpetrated sibling bullying, and $15\ \%$ of those without disabilities                                |
| Tanrikulu and Campbell (2015)            | 39.0 % perpetrated sibling bullying either online or in person  |
| Tanskanen et al. (2017)                  | No prevalence reported  |
| Tippett and Wolke (2015)                 | 35.6 % perpetration, and 45.8 % victimisation   |
| Toseeb (2022)                            | No prevalence reported  |
| Toseeb and Wolke (2021)                  | At age 11, 48 % were involved in sibling bullying, regardless of role (4 % perpetrators, 15 % victims, 29 % bully-victims), and at age 14, 34 |
| Toseeb et al. (2018)                     | % were involved (5 % perpetrators, 8 % victims, 21 % bully-victims) 49 % perpetration, and 58 % victimisation                                 |
| Toseeb, McChesney, Dantchev, and         | At age 11, 4 % were perpetrators, 16 % were victims, and 28 % were bully-victims  |
| Wolke (2020)                             |   |
| Toseeb, McChesney, Oldfield, and         | At age 11, 49 % were involved in sibling bullying, regardless of role (4 % perpetrators, 16 % victims, 29 % bully-victims), and at age 14, 34 |
| Wolke (2020)                             | % were involved (5 % perpetrators, 8 % victims, 21 % bully-victims)   |
| Tucker et al. (2013)                     | 39.8 % males were victims, and 35.4 % females were victims  |
| Tucker et al. (2017)                     | No prevalence reported  |
| Tucker et al. (2015)                     | No prevalence reported  |
| Valido et al. (2021)                     | No prevalence reported  |
| Walters and Espelage (2020)              | No prevalence reported  |
| Wolke and Samara (2004)                  | Perpetrators: 3.2 % physical, 6.6 % verbal, 3.3 % relational  |
|  | Victims: 4.6 % physical, 4.2 % verbal, 6.8 % relational   |
|  | Bully-victims: 1.3 % physical, 2.3 % verbal, 1.2 relational   |

### References<sup>1</sup>

- Bai, Q., Bai, S., Huang, Y., Hsueh, F. H., & Wang, P. (2020). Family incivility and cyberbullying in adolescence: A moderated mediation model. *Computers in Human Behavior*, 110, Article 106315. https://doi.org/10.1016/j.chb.2020.106315
- Bandura, A. (1978). Social learning theory of aggression. *Journal of Communication*, 28 (3), 12-29.0. https://doi.org/10.1111/j.1460-2466.1978.tb01621.x
- Barlett, C., & Coyne, S. M. (2014). A meta-analysis of sex differences in cyber-bullying behavior: The moderating role of age. Aggressive Behavior, 40(5), 474–488. https://
- Bar-Zomer, J.\*, & Brunstein Klomek, A. (2018). Attachment to parents as a moderator in the association between sibling bullying and depression or suicidal ideation among children and adolescents. Frontiers in Psychiatry, 9, 72. https://doi.org/10.3389/ fpsyt.2018.00072
- Note. References marked with an asterisk are those that were included in the scoping review.

- Berlan, E. D., Corliss, H. L., Field, A. E., Goodman, E., & Austin, S. B. (2010). Sexual orientation and bullying among adolescents in the growing up today study. *Journal of Adolescent Health*, 46(4), 366–371. https://doi.org/10.1016/j. jadohealth.2009.10.015
- Bowes, L.\*., Wolke, D., Joinson, C., Lereya, S. T., & Lewis, G. (2014). Sibling bullying and risk of depression, anxiety, and self-harm: A prospective cohort study. *Pediatrics*, 134 (4), e1032–e1039. https://doi.org/10.1542/peds.2014-0832
- Buelga, S., Martínez-Ferrer, B., & Cava, M. J. (2017). Differences in family climate and family communication among cyberbullies, cybervictims, and cyber bully-victims in adolescents. *Computers in Human Behavior*, 76, 164–173. https://doi.org/10.1016/j. chb.2017.07.017
- Campione-Barr, N. (2017). The changing nature of power, control, and influence in sibling relationships. In N. Campione-Barr (Ed.), 156. Power, Control, and Influence in Sibling Relationships Across Development (pp. 7–14). New Directions for Child and Adolescent Development. https://doi.org/10.1002/cad.20202.
- Adolescent Development. https://doi.org/10.1002/cad.20202.

  Chen, Q., Lo, C., Zhu, Y., Cheung, A., Chan, K. L., & Ip, P. (2018). Family polyvictimization and cyberbullying among adolescents in a Chinese school sample. *Child Abuse & Neglect*, 77, 180–187. https://doi.org/10.1016/j.chiabu.2018.01.015

- Clark, D. (2022, September 21). Households by Number of Children in the EU in 2021. Statista https://www.statista.com/statistics/933981/households-by-number-of-children-europe/
- Corralejo, S. M.\*., Jensen, S. A., & Greathouse, A. D. (2018). Time-out for sibling aggression: An analysis of effective durations in a natural setting. *Child & Family Behavior Therapy*, 40(3), 187–203. https://doi.org/10.1080/ 07317107.2018.1487701
- Coyle, S.\*., Demaray, M. K., Malecki, C. K., Tennant, J. E., & Klossing, J. (2017). The associations among sibling and peer-bullying, social support and internalizing behaviors. *Child & Youth Care Forum*, 46(6), 895–922. https://doi.org/10.1007/ s10566-017-9412-3
- Dantchev, S.\*., & Wolke, D. (2019a). Trouble in the nest: Antecedents of sibling bullying victimization and perpetration. *Developmental Psychology*, 55(5), 1059–1071. https://doi.org/10.1037/dev0000700
- Dantchev, S.\*., & Wolke, D. (2019b). Sibling bullying at 12 years and high-risk behavior in early adulthood: A prospective cohort study. Aggressive Behavior, 45(1), 18–32. https://doi.org/10.1002/ab.21793
- Dantchev, S.\*., Zammit, S., & Wolke, D. (2018). Sibling bullying in middle childhood and psychotic disorder at 18 years: A prospective cohort study. *Psychological Medicine*, 48 (14), 2321–2328. https://doi.org/10.1017/S0033291717003841
- Dantchev, S.\*., Hickman, M., Heron, J., Zammit, S., & Wolke, D. (2019). The independent and cumulative effects of sibling and peer bullying in childhood on depression, anxiety, suicidal ideation, and self-harm in adulthood. Frontiers in Psychiatry, 10, 651. https://doi.org/10.3389/fpsyt.2019.00651
- Deniz, E.\*., & Toseeb, U. (2023). A longitudinal study of sibling bullying and mental health in autistic adolescents: the role of self-esteem [preprint]. PsyArXiv. https://doi.org/10.31234/osf.io/km9f2. in press.
- Deniz, E.\*, Derinalp, P., Gulkanat, I., Kaz, C., Ozhan, N., & Toseeb, U. (2022). Sibling bullying in Turkish adolescents: Translation and cross-cultural validation of the sibling bullying questionnaire. *Journal of Family Violence*, 38, 379–392. https://doi. org/10.1007/s10806-022-00360-2
- Duncan, R. D.\*. (1999). Peer and sibling aggression: An investigation of intra-and extra-familial bullying. *Journal of Interpersonal Violence*, 14(8), 871–886. https://doi.org/10.1177/088626099014008005
- Eriksen, S.\*., & Jensen, V. (2006). All in the family? Family environment factors in sibling violence. *Journal of Family Violence*, 21(8), 497–507. https://doi.org/ 10.1007/s10896-006-9048-9
- Eriksen, S.\*., & Jensen, V. (2009). A push or a punch: Distinguishing the severity of sibling violence. *Journal of Interpersonal Violence*, 24(1), 183–208. https://doi.org/ 10.1177/0886260508316298
- Eslea, M., & Rees, J. (2001). At what age are children most likely to be bullied at school? Aggressive Behavior, 27, 419–429. https://doi.org/10.1002/ab.1027
- Fite, P. J.\*., O'Dell, C., Doyle, R. L., & Tampke, E. C. (2021). Proactive and reactive aggression towards siblings versus peers. *Journal of Psychopathology and Behavioral Assessment*, 43(1), 12–20. https://doi.org/10.1007/s10862-020-09849-w
- Foody, M.\*., Samara, M., & O'Higgins Norman, J. (2020). Bullying by siblings and peers: Poly-setting victimization and the association with problem behaviours and depression. *British Journal of Educational Psychology*, 90(S1), 138–157. https://doi. org/10.1111/bjep.12311
- Gladden, R. M., Vivolo-Kantor, A. M., Hamburger, M. E., & Lumpkin, C. D. (2014).
  Bullying surveillance among youths: Uniform definitions for public health and recommended data elements. Centers for Disease Control and Prevention: National Center for Injury Prevention and Control. https://stacks.cdc.gov/view/cdc/21596/cdc/21596 DSI pdf
- Gower, A., Rider, G., McMorris, B., & Eisenberg, M. (2018). Bullying victimization among LGBTQ youth: Critical issues and future directions. *Current Sexual Health Reports*, 10(4), 246–254. https://doi.org/10.1007/s11930-018-0169-y
- Reports, 10(4), 246–254. https://doi.org/10.1007/s11930-018-0169-y
  Heino, E., Ellonen, N., & Kaltiala, R. (2021). Transgender identity is associated with bullying involvement among Finnish adolescents. Frontiers in Psychology, 11, 1–11. https://doi.org/10.3389/fpsyg.2020.612424
- Hoetger, L. A.\*., Hazen, K. P., & Brank, E. M. (2015). All in the family: A retrospective study comparing sibling bullying and peer bullying. *Journal of Family Violence*, 30(1), 103–111. https://doi.org/10.1007/s10896-014-9651-0
- Horsley, T. (2019). Tips for improving the writing and reporting quality of systematic, scoping, and narrarive reviews. *Journal of Continuing Education in the Health Professions*, 54-57. https://doi.org/10.1097/CEH.0000000000000241
- Ingram, K. M.\*., Espelage, D. L., Davis, J. P., & Merrin, G. J. (2020). Family violence, sibling, and peer aggression during adolescence: Associations with behavioral health outcomes. Frontiers in Psychiatry, 11, 26. https://doi.org/10.3389/fpsyt.2020.00026
- Ireland, J. L. (2011). Bullying in prisons: Bringing research up to date. In C. Monks, & I. Coyne (Eds.), Bullying in different contexts (pp. 137–156). Cambridge University Press. https://doi.org/10.1017/CBO9780511921018.007.
- Kim, J.\*., & Kim, E. (2019). Bullied by siblings and peers: The role of rejecting/neglecting parenting and friendship quality among Korean children. *Journal of Interpersonal Violence*, 34(11), 2203–2226. https://doi.org/10.1177/0886260516659659
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. Psychological Bulletin, 140(4), 1073–1137. https://doi.org/10.1037/ a0035618
- Linares, L. O.\*, Jimenez, J., Nesci, C., Pearson, E., Beller, S., Edwards, N., & Levin-Rector, A. (2015). Reducing sibling conflict in maltreated children placed in foster homes. Prevention Science, 16(2), 211–221. https://doi.org/10.1007/s11121-014-0475.
- Liu, X.\*., Peng, C., Yu, Y., Yang, M., Qing, Z., Qiu, X., & Yang, X. (2020). Association between sub-types of sibling bullying and mental health distress among Chinese

- children and adolescents. Frontiers in Psychiatry, 11, 368. https://doi.org/10.3389/fbsyt.2020.00368
- Liu, X.\*, Wolloh, M. G., II, Lin, X., Qiu, X., Qing, Z., Wang, W., ... Lu, D. (2021). The association between sibling bullying and psychotic-like experiences among children age 11–16 years in China. *Journal of Affective Disorders*, 284, 31–37. https://doi.org/10.1016/j.jad.2021.01.073
- Mackey, A. L.\*, Fromuth, M. E., & Kelly, D. B. (2010). The association of sibling relationship and abuse with later psychological adjustment. *Journal of Interpersonal Violence*, 25(6), 955–968. https://doi.org/10.1177/0886260509340545
- Martinez, K.\*., & McDonald, C. (2016). By the hands of our brothers: An exploration of sibling-to-sibling aggression for victimized heterosexual and sexual minority women. Journal of GLBT Family Studies, 12(3), 242–256. https://doi.org/10.1080/1550428X.2015.1041069
- Martinez, K.\*., & McDonald, C. (2021). Inter-sibling violence as a mechanism of hegemony: Retrospective accounts from a non-binary and LGBTQ+ sample in the United States. *Journal of Gender-Based Violence*, 5(2), 215–229. https://doi.org/ 10.1332/239868020X16091677096875
- Mathis, G.\*., & Mueller, C. (2015). Childhood sibling aggression and emotional difficulties and aggressive behavior in adulthood. *Journal of Family Violence*, 30(3), 315–327. https://doi.org/10.1007/s10896-015-9670-5
- McCormick, M., & Krieger, M. (2020). Religion and bullying: Perspectives from sexual and gender minority youth (SGMY) in Michigan. *Journal of Gay & Lesbian Social* Services, 32(2), 191–208. https://doi.org/10.1080/10538720.2020.1728460
- McDonald, C.\*., & Martinez, K. (2016). Parental and others' responses to physical sibling violence: A descriptive analysis of victims' retrospective accounts. *Journal of Family Violence*, 31(3), 401–410. https://doi.org/10.1007/s10896-015-9766-y
- Menesini, E.\*., Camodeca, M., & Nocentini, A. (2010). Bullying among siblings: The role of personality and relational variables. *British Journal of Developmental Psychology*, 28 (4), 921–939. https://doi.org/10.1348/026151009X479402
- Meyers, A.\*. (2014). A call to child welfare: Protect children from sibling abuse. Qualitative Social Work, 13(5), 654–670. https://doi.org/10.1177/ 1473325014527332
- Monks, C. P., & Smith, P. K. (2006). Definitions of bullying: Age differences in understanding of the term, and the role of experience. *British Journal of Developmental Psychology*, 24(4), 801–821. https://doi.org/10.1348/ 026151005X82352
- Morrill, M.\*., Bachman, C., Polisuk, B., Kostelyk, K., & Wilson, S. (2018). An exploration of the relationship between experiences with sibling abuse and peer bullying: A pilot study. *Journal of Child & Adolescent Trauma, 11*(1), 113–120. https://doi.org/10.1007/s40653-017-0156-x
- Nesdale, D., & Naito, M. (2005). Individualism-collectivism and the attitudes to school bullying of Japanese and Australian students. *Journal of Cross-Cultural Psychology*, 36 (5), 537–556. https://doi.org/10.1177/0022022105278541
- Nielsen, M. B., & Einarsen, S. V. (2018). What we know, what we do not know, and what we should and could have known about workplace bullying: An overview of the literature and agenda for future research. Aggression and Violent Behavior, 42, 71–83. https://doi.org/10.1016/j.avb.2018.06.007
- Nocentini, A., Fiorentini, G., Di Paola, L., & Menesini, E. (2019). Parents, family characteristics and bullying behavior: A systematic review. Aggression and Violent Behavior, 45, 41–50. https://doi.org/10.1016/j.avb.2018.07.010
- OECD. (2019). PISA 2018 results (volume III): What school life means for Students' lives, PISA. OECD Publishing. https://doi.org/10.1787/acd78851-en
- Office for National Statistics. (2021). Families and households (2020) [Data set]. Office for National Statistics https://www.ons.gov.uk/peoplepopulationandcommunity/birth sdeathsandmarriages/families/bulletins/familiesandhouseholds/2020
- Okudaira, H., Kinari, Y., Mizutani, N., Ohtake, F., & Kawaguchi, A. (2015). Older sisters and younger brothers: The impact of siblings on preference for competition. Personality and Individual Differences, 82, 81–89. https://doi.org/10.1016/j. paid.2015.02.037
- Olweus, D. (1993). *Bullying at School: What We Know and What We Can Do.* Blackwell Publishers Inc.. https://doi.org/10.1002/pits.10114

  Peters, M. D. J., Godfrey, C. M., McInerney, K. H., Parker, D., & Baldini Soares, C. (2017).
- Peters, M. D. J., Godfrey, C. M., McInerney, K. H., Parker, D., & Baldini Soares, C. (2017). Guidance for conducting systematic scoping reviews. *International Journal of Evidence Based Healthcare*, 13(3), 141–146. https://doi.org/10.1097/xeb.00000000000000000
- Plamondon, A.\*., Bouchard, G., & Lachance-Grzela, M. (2021). Family dynamics and young adults' well-being: The mediating role of sibling bullying. *Journal of Interpersonal Violence*, 36(9–10), NP5362–NP5384. https://doi.org/10.1177/ 0886260518800313
- Rose, C. A.\*., Simpson, C. G., & Ellis, S. K. (2016). The relationship between school belonging, sibling aggression and bullying involvement: Implications for students with and without disabilities. *Educational Psychology*, 36(8), 1462–1486. https://doi. org/10.1080/01443410.2015.1066757
- Schihalejev, O., Kuusisto, A., Vikdahl, L., & Kallioniemi, A. (2020). Religion and children's perceptions of bullying in multicultural schools in Estonia, Finland and Sweden. *Journal of Beliefs & Values*, 41(3), 371–384. https://doi.org/10.1080/ 13617672.2019.1686732.
- Sittichai, R., & Smith, P. K. (2015). Bullying in south-east Asian countries: A review. Aggression and Violent Behavior, 23, 22–35. https://doi.org/10.1016/j. avb.2015.06.002
- Smith, P. K. (2016). Bullying: Definition, types, causes, consequences and intervention. Social and Personality Psychology Compass, 10(9), 519–532. https://doi.org/10.1111/ spc3.12266
- Smith, P. K., & Berkkun, F. (2020). How prevalent is contextual information in research on school bullying? Scandinavian Journal of Psychology, 61, 17–21. https://doi.org/ 10.1111/sjop.12537

- Smith, P. K., & Robinson, S. (2019). How does individualism-collectivism relate to bullying victimization? *International Journal of Bullying Prevention*, 1, 3–13. https://doi.org/10.1007/s42380-018-0005-y
- Smith, P. K., Robinson, S., & Slonje, R. (2021). The school bullying research program: Why and how it has developed. In I. P. K. Smith, & J. O'Higgins Norman (Eds.), Vol. 1. The Wiley Blackwell handbook of bullying: A comprehensive and international review of research and intervention (pp. 42–59). Wiley. https://doi.org/10.1002/ 0781118482650
- Sriram, R., & Ganapathy, H. (1997). The unresolved dilemma: Child care options in agricultural contexts. *Economic and Political Weekly*, WS64-WS72. https://www.jstor. org/stable/4406009.
- Steinbach, A., & Hank, K. (2018). Full-, half-, and step-sibling relations in young and middle adulthood. *Journal of Family Issues*, 39(9), 2639–2658. https://doi.org/ 10.1177/0192513X18757829
- Tanrikulu, I.\*., & Campbell, M. A. (2015). Sibling bullying perpetration: Associations with gender, grade, peer perpetration, trait anger, and moral disengagement. *Journal of Interpersonal Violence*, 30(6), 1010–1024. https://doi.org/10.1177/0886260514539763
- Tanskanen, A. O.\*, Danielsbacka, M., Jokela, M., & Rotkirch, A. (2017). Sibling conflicts in full- and half-sibling households in the UK. *Journal of Biosocial Science*, 49(1), 31–47. https://doi.org/10.1017/S0021932016000043
- Tippett, N.\*., & Wolke, D. (2015). Aggression between siblings: Associations with the home environment and peer bullying: Aggression between siblings. Aggressive Behavior, 41(1), 14–24. https://doi.org/10.1002/ab.21557
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior, 26*(3), 277–287. https://doi.org/10.1016/j.chb.2009.11.014
- Toseeb, U.\*. (2022). Sibling conflict during COVID-19 in families with special educational needs and disabilities. *British Journal of Educational Psychology*, *92*(1), 319–339. https://doi.org/10.1111/bjep.12451
- Toseeb, U.\*., & Wolke, D. (2021). Sibling bullying: A prospective longitudinal study of associations with positive and negative mental health during adolescence. *Journal of Youth and Adolescence*, 51, 940–955. https://doi.org/10.1007/s10964-021-01495-z
- Toseeb, U.\*., McChesney, G., & Wolke, D. (2018). The prevalence and psychopathological correlates of sibling bullying in children with and without autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 48(7), 2308–2318. https://doi.org/10.1007/s10803-018-3484-2
- Toseeb, U.\*., McChesney, G., Dantchev, S., & Wolke, D. (2020). Precursors of sibling bullying in middle childhood: Evidence from a UK-based longitudinal cohort study. *Child Abuse & Neglect, 108*, Article 104633. https://doi.org/10.1016/j.chiabu.2020.104633
- Toseeb, U.\*., McChesney, G., Oldfield, J., & Wolke, D. (2020). Sibling bullying in middle childhood is associated with psychosocial difficulties in early adolescence: The case of individuals with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 50(5), 1457–1469. https://doi.org/10.1007/s10803-019-04116-8
- Tucker, C. J., & Finkelhor, D. (2017). The state of interventions for sibling conflict and aggression: A systematic review. *Trauma, Violence, & Abuse, 18*(4), 396–406. https://doi.org/10.1177/1524838015622438

- Tucker, C. J., & Updegraff, K. (2009). The relative contributions of parents and siblings to child and adolescent development. New Directions for Child and Adolescent Development, 126, 13–28. https://doi.org/10.1002/cd.254
- Tucker, C. J.\*., Finkelhor, D., Shattuck, A. M., & Turner, H. (2013). Prevalence and correlates of sibling victimization types. *Child Abuse & Neglect*, 37(4), 213–223. https://doi.org/10.1016/j.chiabu.2013.01.006
- Tucker, C. J.\*., Van Gundy, K. T., Wiesen-Martin, D., Hiley Sharp, E., Rebellon, C. J., & Stracuzzi, N. F. (2015). Proactive and reactive sibling aggression and adjustment in adolescence. *Journal of Interpersonal Violence*, 30(6), 965–987. https://doi.org/10.1177/0886260514539760
- Tucker, C. J.\*., Finkelhor, D., & Turner, H. (2017). Victimization by siblings in children with disability or weight problems. *Journal of Developmental & Behavioral Pediatrics*, 38(6), 378–384. https://doi.org/10.1097/DBP.00000000000000456
- Valido, A.\*., Ingram, K., Espelage, D. L., Torgal, C., Merrin, G. J., & Davis, J. P. (2021). Intra-familial violence and peer aggression among early adolescents: Moderating role of school sense of belonging. *Journal of Family Violence*, 36(1), 87–98. https://doi.org/10.1007/s10896-020-00142-8
- Vivolo-Kantor, A. M., Martell, B. N., Holland, K. M., & Westby, R. (2014). A systematic review and content analysis of bullying and cyber-bullying measurement strategies. Aggression and Violent Behavior, 19(4), 423–434. https://doi.org/10.1016/j. arxholland.
- Volk, A. A., Farrell, A. H., Franklin, P., Mularczyk, K. P., & Provenzano, D. A. (2016). Adolescent bullying in schools: An evolutionary perspective. In I. D. C. Geary, & D. B. Berch (Eds.), Evolutionary perspective on child development and education (pp. 167–191). Springer. https://doi.org/10.1007/978-3-319-29986-0\_7.
- Walters, G. D.\*, & Espelage, D. L. (2020). Hostility, anger, and dominance as mediators of the sibling aggression-school fighting relationship: Mechanisms of violence generalization. Psychology of Violence, 10(1), 48–57. https://doi.org/10.1037/ vio0000227
- Wiehe, V. R. (1997). Sibling Abuse: Hidden Physical, Emotional, and Sexual Trauma. Thousand Oaks: Sage. https://doi.org/10.4135/9781452232058
- Wolke, D., & Skew, A. J. (2012). Bullying among siblings. International Journal of Adolescent Medicine and Health, 24(1), 17–25. https://doi.org/10.1515/ iiamh.2012.004
- Wolke, D.\*., & Samara, M. M. (2004). Bullied by siblings: Association with peer victimisation and behaviour problems in Israeli lower secondary school children. *Journal of Child Psychology and Psychiatry*, 45(5), 1015–1029. https://doi.org/ 10.1111/j.1469-7610.2004.t01-1-00293.x
- Xu, M., Macrynikola, N., Waseem, M., & Miranda, R. (2020). Racial and ethnic differences in bullying: Review and implications for intervention. Aggression and Violent Behavior. 50. Article 101340. https://doi.org/10.1016/j.avb.2019.101340
- Zhao, S. Z., Luk, T. T., Guo, N., Wang, M. P., Lai, A. Y. K., Wong, B. Y. M., ... Lam, T. H. (2021). Association of mobile instant messaging chat group participation with family functioning and well-being: Population-based cross-sectional study. *Journal of Medical Internet Research*, 23(3), Article e18876. https://doi.org/10.2196/18876