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Domestic Abuse Sibling studY (DASY): a multimethod study protocol

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ABSTRACT

Introduction Domestic violence and abuse (DVA) is an everyday aspect of many children and young people's lives, both in the home and in their own relationships. Studies estimate that up to one million children and young people experience some form of DVA each year in the UK. Although the majority of families experiencing DVA have more than one child, most research to date has focused on individual children within these families. This study aims to explore the views of practitioners, parent/carers and young people on sibling responses in the context and aftermath of DVA. Our protocol has followed SPIRIT guidelines.

Methods and analysis We propose a multimethod study consisting of semistructured interviews, the completion of Sibling Relationship Questionnaires, photovoice interviews and illustrative case studies to explore sibling experiences in the context and aftermath of DVA. A purposive sample of front-line practitioner participants will be recruited and interviewed first. We will ask them to introduce us to parent/carer and young people participants using a snowball approach (n=70). Qualitative data will be analysed through reflexive thematic analysis, theoretically underpinned by critical realism, to explore patterns in participants' views and experiences of siblings in the context and aftermath of DVA. Quantitative data collected from the Sibling Relationship Questionnaire's four domains (warmth/closeness, power/status, conflict and rivalry) will be analysed. Data triangulation of the quantitative and qualitative data within this study will occur at the results interpretation stage.

Ethics and dissemination Ethical approval has been obtained from the University of Birmingham Research Ethic Committee (ERN_21-0795). Findings will be published in open access peer-reviewed journals and presented at relevant conferences and events. Child-facing infographics and front-line practitioner guides will also be produced.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ The multimethod design will gather data from three sample populations, increasing the validity and trustworthiness of this study's findings.
⇒ This study includes and prioritises the voices of young people, which are often overlooked.
⇒ Using a snowball approach to participant recruitment reduces anonymity within family groups and means we are accessing a closed network of participants.
⇒ All data collected will be self-reported, therefore, recall bias may influence the results.

INTRODUCTION

Domestic violence and abuse (DVA) is an everyday aspect of many children and young people's lives, both in the home and in their own relationships.[1 2] In the UK, studies estimate that up to one million children and young people experience DVA each year.[3 4] However, the problem is likely to be more prevalent than statistics show due to low reporting rates. Studies internationally have shown the detrimental impact DVA can have on children and young people, describing it as a significant risk factor for their physical, emotional and social development.[5 6] While there is increasing recognition around the effects of DVA on children and young people, gaps still remain in understanding risk and resilience, especially with regard to siblings.[7 8]

Although the majority of families that experience DVA have more than one child, most research to date has focused on individual children within these families.[9] Only focusing on one child makes an assumption that all children are at equal risk of adjustment problems.[10] It also overlooks the opportunity to understanding the role of sibling dynamics around similarities and variations in responses to DVA.

The sibling relationship is unique, and for some can be one of the most enduring relationships in life, starting at birth and continuing until death. Siblings can provide an important source of support and play a vital role in an individual's well-being.[11–13] Sibling relationships can be categorised by love and warmth, providing security and the opportunity to develop social abilities and self-identity.[11 12] However, sibling relationships can also be a point of escalating conflict and problems, engrained with rivalry and conflict.[14]

Future romantic relationships or relationships between young people and their mothers are the most frequent relationships considered in DVA literature around children and young people.[15] A small number of studies have started to explore sibling

relationships in the context of DVA.[10 16–18] Piotrowski and Cameranesi,[16] for example, have recently explored sibling aggression in children who have experienced DVA, finding that earlier exposure contributed to later emergence of aggressive behaviour. Our study will focus on the understudied relationship of siblings and their diverse responses to DVA experience.

The primary objective of this study is to investigate sibling responses in the context and aftermath of DVA. This is to increase understanding around the role of sibling relationships in the recognition of risks and the development of resilience when experiencing DVA. The core aim of this study is to: Evaluate critically how sibling relationships can be protective, neutral or aggravating in the context and aftermath of experiencing DVA. This project will explore these responses within a range of different sibling types (eg, biological, step, half and adoptive).

METHODS AND ANALYSIS

We propose a multimethod study consisting of semistructured interviews, the completion of Sibling Relationship Questionnaires, photovoice interviews and the examination of illustrative case studies.

Patient and public involvement

A Young Person Advisory Group (YPAG) has been established to help steer the study design. The group consists of young people (aged 13–16) from a regional group of Police Cadets. While some group members may have experienced DVA, this was not an inclusion criterion for participation. Members are able to advocate the voice of young people, expressing their views while actively being involved in the design and development of this study. YPAG members will review the activities planned for young people participants, providing insight into how accessibility may be improved. The YPAG will remain involved throughout the duration of the study, guiding recruitment and data collection strategies, reflecting on the findings and advising on knowledge transfer.

Participant population

This study will seek understanding from three populations: front-line practitioners; parent/carers and young people. We aim to recruit 70 participants: 10 front-line practitioners, 20 parent/carers and 40 young people (20 sibling groups), but our goal is to reach as many participants as we can. Young people participants are deliberately the largest sample population, as this study aims to prioritise their views.

Participant recruitment

Participant recruitment will start by purposively sampling 10 front-line practitioner participants. This will be facilitated by BD (primary researcher) who is employed by a specialist organisation providing support to children and young people experiencing DVA. Senior managers within the organisation will act as gatekeepers to potential participants, advertising the opportunity to eligible staff. Practitioners will then be provided with the opportunity to contact the primary researcher should they want to participate. Once the study has recruited front-line practitioner participants, we will then change to a snowball approach (see figure 1), where these 10 front-line practitioner participants will aim to identify two parent/carer participants each, who have experienced DVA in their own intimate relationship. At least two of their children will then form our young people's participant group. These young people will be between the ages of 12 and 17 so that we are able to assess their competency to understand what they are consenting when agreeing to participate. Parental consent to participate will be sought from and provided by the non-abusive parent. If a family has more than two eligible siblings, all will be able to participate should they consent. We will aim to include a range of sibling types (eg, biological, step, half and adoptive). See box 1 for full participant inclusion criteria.

We recognise that there may be a number of challenges with recruitment and gaining informed consent from

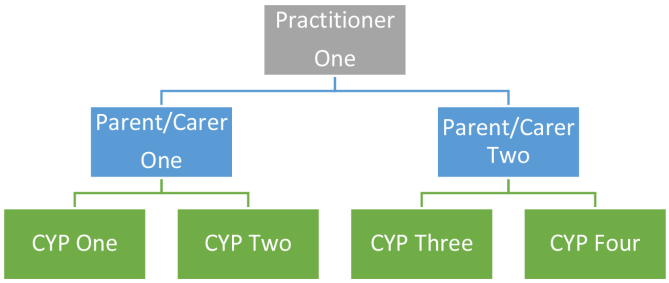

Figure 1 Recruitment Strategy. Figure 1 illustrates the recruitment strategy planned for DASY. This strategy will be repeated ten times to recruit the proposed 70 participants for this study. We aim for 10 front-line practitioner participants to identify 2 parent/carer participants each, and 2 of their children (CYP). DASY, Domestic Abuse Sibling studY.

Box 1 Participant inclusion criteria

Practitioner participants

⇒ In a role supporting children and young people experiencing domestic violence and abuse (DVA).

Parent/carer participants

⇒ Experienced DVA in own relationship.
⇒ Accessed support from a specialist support service.
⇒ No longer be in an abusive relationship (for at least 6 months).
⇒ Have more than one child (biological or non-biological), aged over 12.

Young people participants

⇒ Aged between 12 and 17.
⇒ Experienced DVA in parent/carer relationship.
⇒ Accessing (or having accessed) support from a specialist support service.
⇒ Parent/carer no longer in an abusive relationship (for at least 6 months).

all within a family. Our preference would be to have the full 'participant group' comprising: a practitioner with a parent and at least two children they have supported. However, once a practitioner has identified a parent/carer (and the parent/carer identified two or more of their children), all will be considered as individual participants in their own right. Therefore, the withdrawal or non-consent of any participant will not affect other initially linked participants. While we aim to prioritise the views of young people, if any members within the family unit withdraws or does not consent (eg, one of the siblings), the other members will be able to continue participating in the study. Their individual insight will remain valuable to the study.

Any participant can withdraw from the study without worrying that it will affect anyone else involved. With participants being recognised individually, we mitigate the potential for participants to pressure other participants to continue or withdraw from the study; we are still able to gather valuable insight from all participants individually that would be missed should we exclude all from the study if one withdraws. We have also made clear in the participant information sheets that participation in this study will be totally separate from their access to/delivery of support, reassuring all participants that support will continue outside of this study regardless of participation.

While there are limitations to snowball sampling, such as reduced anonymity within family groups and accessing a closed network of participants, these are outweighed by the protection of participants enabled by this approach. We can be assured that participating families are engaging with support services and not currently experiencing DVA, which may not be guaranteed if we were to take a more random sampling approach.

Data collection

Data collection is planned to take place between August 2022 and May 2023.

Practitioners

Data will be collected through semistructured interviews, following an interview guide consisting of three key topics:

1. Young people's experience of DVA.
2. The impact of DVA on sibling relationships and their experience of coping and responding.
3. Approach to supporting siblings.

During the interviews, practitioners will also be encouraged to share anonymous case studies of families that they have supported to highlight and describe varying sibling dynamics and their experiences of growing up with DVA. We seek to explore the similarities and differences between sibling coping strategies, protective factors and aggravating factors.

Parent/carers

Data will be collected through semistructured interviews. The interview guide will comprise three key topics:

- Own experience of DVA.
- Children's experience of DVA.
- Sibling experience of DVA.

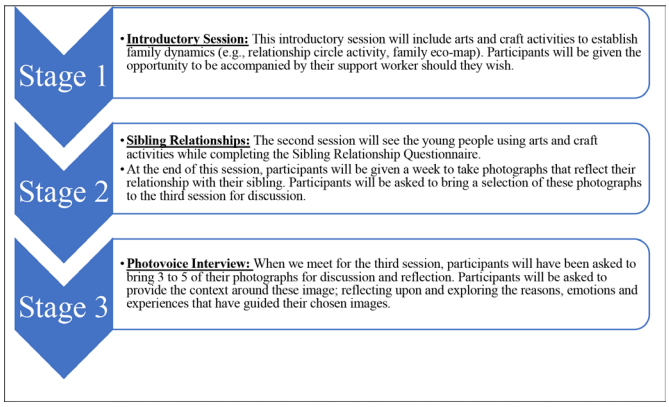

Figure 2 Young people interview guide. Figure 2 illustrates the three stage approach to interviews with young people participants.

Young people

There will be a three-stage approach to engaging with young people to ensure the study remains child-focused and participatory (see figure 2). Visual and activity focused methods will be adopted to help the young people engage with the study. The primary research (BD) needs to ensure a trusting relationship is built with the young people, rather than expecting them to participate in a one-off interview. Interviews with the young people participants will be completed on an individual basis rather than in sibling groups to ensure all participants feel able to speak openly and share their experiences.

Sibling Relationship Questionnaire

To measure the quality of sibling relationships, young people participants will complete the Sibling Relationship Questionnaire-Revised (SQR-R).[19] This self-report measure tool consists of 48 questions covering 4 main factors thought to define sibling relationships:

1. Warmth/closeness (intimacy, prosocial behaviour, companionship, similarity, admiration and affection).
2. Power/ status (nurturance and dominance).
3. Conflict (quarrelling, antagonism and competition).
4. Rivalry (parental partiality).[19–21]

A five-point Likert scale (1=hardly at all to 5=extremely much) is used for all questions except those exploring parental partiality (in which the responses range from 1=sibling always favoured to 5=I am always favoured). A proportion of the 48 questions are prefaced with a statement to highlight that all responses are equally acceptable, aiming to reduce the potential for participants to select a response which they deem more socially acceptable.[19] For example, 'Some siblings care about each other a lot while other siblings don't care about each other that much. How much do you and this sibling care about each other?'.

Factorial and construct validity of the SRQ-R has been completed by Derkman *et al*[22] using a sample of 428

Dutch adolescents, aged 13–16. This study focused on two of the four overarching dimensions (warmth/closeness and conflict), and their 10 qualities. Most of the factor loadings were high (above 0.70) and significant ($p<0.05$), with the construct validity of SRQ found to be adequate. Cronbach's alphas coefficients for warmth/ closeness and conflict were 0.94 and 0.93, respectively, indicating the dimensions and their 10 qualities are measured reliably with the SRQ-R. Moser and Jacob[23] also investigated the construct validity by exploring correlation of scales within the questionnaire with the Family Environment Questionnaire,[24] concluding it to be adequate. The analysis of the Sibling Relationship Questionnaire indicated adequate test–retest and internal consistency reliability, and construct validity.[23]

The tool has been used in many studies to measure the quality of sibling relationships.[22 25–27] Some use the SRQ-R as a retrospective tool,[20 28] whereas it has also been used in real time with children and young people.[29] The SQR-R is valid for this current study's sample having been successfully used in other studies to examine sibling relationships in children who have experienced childhood adversities. This includes one other study examining sibling relationships of children from violent homes,[30] and others exploring sibling relationships in the young people who are placed in foster care following maltreatment.[31 32]

Photovoice interviews

For the young people participating, we will also introduce a qualitative participatory approach by employing photovoice as one of our methods, enabling rich and meaningful data to be gathered that traditional qualitative methods alone would not capture.[33] 'Photovoice, at its most basic level, is the use of photographic equipment, usually digital, to capture a visual image and then to transform this image into a vehicle for generating information and discussion'.[34] Photovoice will be used to generate discussions with young people around their relationship with their siblings in the context and aftermath of DVA. Images will be used to facilitate discussions with the young people; they will be asked to take photographs to represent the relationship they have with their sibling. These photos, and the context around them (provided by the young people), will then be analysed. Photovoice provides a means of meaningful participation in research for young people about their lives, experiences and needs.[35] This participatory method was created by Wang and Burris,[36] and has gained popularity in a range of public health research including nursing, education, social worker and public health.[37] Not all young people are in a position to have technology readily available to them. To ensure our study remains accessible to all, we will provide disposable cameras to young people who do not have the means to take their photographs already.[38]

Young people participating will be involved in the three-stage process that provides the foundation for analysis of photovoice[36]:

1. Selecting—choosing those photographs that most accurately reflect their views and experiences.
2. Contextualising—telling stories about what the photographs mean.
3. Codifying—identifying the issues, themes or theories that emerge.

However, young people participating will be part of the codifying stage for their own photographs only. This third stage will be completed again by the research team across all of the photovoice interviews, with the aim of identifying issues, themes and theories across the full cohort.

There are challenges in using photovoice. The young people participants will be asked to take the photographs away from the research setting, meaning parent/carers and other people within their ecosystem have the potential to influence and interfere with this activity. Parent/carers will be given direction not to do this, with a clear explanation of why. A further risk of using photographs as data in research is the possibility for others to have been captured in the photos.[39] In an effort to maintain privacy and ensure confidentiality, all individuals within photos (regardless of whether they are part of our study) will be made unidentifiable in photographs. This will be completed by the primary research as soon as the photos are provided by the young people. We will also make sure it is clear to the young people participants how their photographs will be used.

Data analysis

Thematic analysis

Data from the semistructured interviews (including illustrative case studies), and the photovoice interviews will be analysed through reflexive thematic analysis,[40–43] theoretically underpinned by critical realism.[44] This will allow the study to explore patterns in participants' views and experiences of siblings in the context and aftermath of DVA. The Consolidated criteria for Reporting Qualitative research will be followed to ensure methodological integrity.[45] Both types of interviews will be audio recorded, transcribed verbatim and read multiple times by the primary researcher (BD) to enable familiarity. When using photovoice, photographs are meaningless unless accompanied by participants' voices,[46] therefore, the photograph's contents will be coded together with their accompanying interviews. Interview transcripts will be coded thematically; initial codes will be generated from the data and then revised as the coding process proceeds. There will be movement between the raw data, coded data and themes, thus adopting an iterative analysis process. Our study will use NVivo V.12 to aid data coding and theme identification.

Quantitative analysis

Data from the SRQ-R will be directly entered into the statistical package SPSS (V.28 or later). Missing data will be minimised with the questionnaire being completed alongside the primary researcher who will ensure all young people participants are provided with the opportunity to answer

all questions. For example, this could include reading the questions to the young people if they are unable to do so themselves. Warmth/closeness, power/status and conflict are scored by summing rated items within these domains. The rivalry score is derived by averaging items for maternal partiality and paternal partiality.[47]

Data analysis will begin with a descriptive phase.[48] Descriptive analysis will summarise the data for all domains using frequency distributions, appropriate measures of central tendency and percentages. Analysis will also be made in the context of age and gender differences across all domains. For example, we will explore whether older siblings report higher level of power/status over younger siblings or brothers report higher levels of conflict than sisters. Further exploration is also planned around the influence of sibling relationship type. For example, do biological siblings report higher levels of warmth/closeness than step siblings.

The SRQ-R will collect Likert data, which is ordinal per item, but summated data may be analysed using parametric tests provided the key assumptions are met.[49 50] Once the data have been collected and explored, assumptions will be tested to determine the most appropriate methods for statistical analysis. Data triangulation of the quantitative and qualitative data within this study will occur at the results interpretation stage. This will enable the study to understand whether qualitative findings coincide or differ from quantitative findings.

ETHICS AND DISSEMINATION

Ethical approval of this protocol has been granted by the University of Birmingham Research Ethics Committee (ERN_21-0795). To ensure data confidentiality, the following procedures will be implemented:

1. All participants will be provided with participant information sheets explicitly outlining the study.
2. Written consent will be obtained from all participants (see example in online supplemental file 1). Assent will be obtained from young people participants alongside parental consent.
3. Participant information sheets and consent forms will explicitly outline the right for all participants to withdraw from the study. They will also be reminded of this during the interviews.
4. Only the primary researcher will be aware of the participants' names and safe contact information. Participants will be assigned codenames by the primary researcher (BD) and no identifiable information will be shared.

Data management

Data management and storage will be subject to the UK Data Protection Act 2018 and will follow relevant University of Birmingham policy and procedures. Following the completion of the study, all anonymised data will be kept securely within the University's secure IT system, BEAR, preserved and accessible for ten years. All identifiable data will be stored securely and safely destroyed within 12 months of publication of the study's main findings. Interview recording will be destroyed as soon as they have been transcribed.

Knowledge transfer

Findings from this study will be published in open access peer-reviewed journals and presented at relevant conferences and events. Child-facing infographics will be produced, designed to present the key finding from the study. These will be shared with both young people participants involved in this study, and specialist services providing support to siblings experiencing DVA. Specialist services will also be provided front-line practitioner guides, which share the key findings from the study, including a set of recommendations around best practice responses to supporting siblings experiencing DVA. The YPAG will have remained involved throughout the duration of our study and will also advise on the dissemination of the findings.

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Contributors BD, CB-J and JT designed the study. AS led on the statistical elements of the study and the approach to quantitative analysis. BD produced the first draft of the protocol. All authors provided critical review of the manuscript and have approved the final version. Our protocol has followed SPIRIT guidelines; important protocol modifications will be reported to University of Birmingham Research Ethics Committee.

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Competing interests None declared.

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