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Abstracts

Systematic literature review: Are school-based interventions to prevent teen dating violence theory-driven, and are they effective? A systematic literature review

Background: Adolescents are at risk of experiencing dating violence (DV); this has significant personal and economic consequences. Prevention efforts need to start before adulthood, and school provides a unique platform for this. This review examined what school-based teen DV (TDV) interventions focus on, whether they are theory-driven and their effectiveness. **Method:** A literature search was conducted across OVID (including Embase, PsychInfo, MedLine), Scopus and CINAHL for peer-reviewed papers published, published in English, from 2015 (inclusive) onwards. Titles and abstracts were screened, then potentially eligible articles were reviewed in full. Inclusion criteria were that interventions were school-based, had an explicit aim to reduce DV, had a pre and post quantitative measurement of DV and that participants were aged between 10-20 (inclusive). At each stage, an independent researcher assessed a proportion of papers to ensure agreement. A quality assessment was conducted for each included study. **Findings:** Twenty eligible studies of good-excellent quality were included. Studies most commonly focused on recognising DV, and healthy relationship behaviours. 60% of interventions were theory-driven, with social cognitive theory most commonly underpinning interventions. 70% of interventions significantly improved one or more DV outcome measure. The majority of effect sizes were small. **Conclusions**: Despite small effect sizes, given the opportunity to reach a large number of individuals, and the potential positive personal and economic implications, delivering school-based TDV interventions may be worthwhile. Further research is needed to establish the reliability of interventions, and the mechanisms by which they impact TDV to refine and enhance their efficacy.

Keywords: Teen dating violence, adolescents, prevention, school

Service improvement project: Understanding the psychological needs of parents of whose babies have received care on a Neonatal Care Unit, and exploring the barriers to meeting these

Objectives: Parents of infants admitted to a Neonatal Unit (NNU) can experience elevated distress, which can have negative impacts on both parent and baby wellbeing. However parents often report receiving insufficient psychological support. This project aimed to identify strengths and areas of need regarding the provision of parental psychological support in the current NNU service. **Methods:** A benchmarking exercise was conducted, whereby available UK guidelines regarding NNU parental psychological support were identified; these were then rated against current provision. Following this, 33 parents of babies who received care on the NNU completed a self-report online survey. This investigated the accessibility, barriers and effectiveness of the current support, and what psychological support they felt was needed. Survey data were analysed using descriptive statistics and content analysis. **Results:** The benchmarking exercise found strength in the expertise and breadth of the parental psychological support available whilst their babies were on the unit. It identified gaps in support regarding transition to home, peer-support and parent-informed support. It highlighted a need for further staff resource in order to meet guidelines. The parental survey emphasised that those who received support were generally satisfied with this, particularly benefiting from the opportunity to talk with staff. The survey identified a need to increase the awareness of support, opportunities for discussions, and for staff to initiate support. It also identified a barrier of stigma. **Discussion:** Areas of strength and need with regards to parental psychological support are discussed and recommendations are given to guide future service development.

Keywords: parents, psychological support, neonatal unit, benchmarking

Theory-driven research project: Does the Cognitive-Model predict PTSD symptom severity, and how is this related to shame, in youth who have experienced Intimate Partner Violence?

Background: Intimate Partner Violence (IPV) is prevalent in youth, and can lead to Post-Traumatic Stress Disorder (PTSD). Ehlers and Clark's (2000) Cognitive-Model, which proposes negative appraisals, disjointed memories and unhelpful coping strategies maintain PTSD, commonly informs PTSD treatment. Shame is linked to PTSD symptoms, and the Cognitive-Model. **Objectives** i) To assess if the Cognitive-Model predicts PTSD symptoms in Youth IPV (Y-IPV) survivors. ii) To examine if trauma-related shame predicts PTSD symptoms. iii) To assess if trauma-related shame moderates the relationship between the Cognitive-Model variables and future PTSD symptoms. **Method:** 85 Y-IPV survivors aged 18-25 completed questionnaires measuring the Cognitive-Model variables, trauma-related shame and possible covariates, approximately six months apart. **Results:** Safety behaviours, responses to intrusions and negative appraisals predicted PTSD symptoms; however, when controlling for covariates, only safety behaviours predicted future PTSD symptoms. Trauma-related shame predicted PTSD symptoms; however, when controlling for covariates, it no longer predicted future PTSD symptoms. Trauma-related shame did not moderate the relationship between the Cognitive-Model variables and future PTSD symptoms, when controlling for covariates. **Discussion:** The results provide partial support for the Cognitive-Model, and its prediction of PTSD symptoms, indicating safety behaviours as a unique predictor in Y-IPV survivors. Implications, limitations and future research are discussed.

Keywords: IPV, PTSD, Cognitive-Model, Youth, Shame

Systematic literature review

Are school-based interventions to prevent teen dating violence theory-driven, and are they effective? A systematic literature review

May 2023

Word Count: 6750 (excluding references and appendices, tables as 100 words or less).

Internal supervisor: Dr Myra Cooper, Senior Research Tutor, The Oxford Institute of Clinical Psychology Training and Research.

External supervisor: Dr Carmen Chan, Clinical Psychologist and Service Lead, Oxford Horizon Supporting Youth and Families Affected by Sexual Harm, Oxford Health NHS Foundation Trust.

Proposed journal: Trauma, Violence and Abuse

This journal was chosen as it is a review journal, which aligned with the scope of this paper, as it aims to publish reviews related to issues of trauma, violence, and/or abuse.

Abstract

Background: Adolescents are at risk of experiencing dating violence (DV); this has significant personal and economic consequences. Prevention efforts need to start before adulthood, and school provides a unique platform for this. This review examined what school-based teen DV (TDV) interventions focus on, whether they are theory-driven and their effectiveness. **Method:** A literature search was conducted across OVID (including Embase, PsychInfo, MedLine), Scopus and CINAHL for peer-reviewed papers published, published in English, from 2015 (inclusive) onwards. Titles and abstracts were screened, then potentially eligible articles were reviewed in full. Inclusion criteria were that interventions were school-based, had an explicit aim to reduce DV, had a pre and post quantitative measurement of DV and that participants were aged between 10-20 (inclusive). At each stage, an independent researcher assessed a proportion of papers to ensure agreement. A quality assessment was conducted for each included study. **Findings:** Twenty eligible studies of good-excellent quality were included. Studies most commonly focused on recognising DV, and healthy relationship behaviours. 60% of interventions were theory-driven, with social cognitive theory most commonly underpinning interventions. 70% of interventions significantly improved one or more DV outcome measure. The majority of effect sizes were small. **Conclusions**: Despite small effect sizes, given the opportunity to reach a large number of individuals, and the potential positive personal and economic implications, delivering school-based TDV interventions may be worthwhile. Further research is needed to establish the reliability of interventions, and the mechanisms by which they impact TDV to refine and enhance their efficacy.

Keywords: Teen dating violence, adolescents, prevention, school

Introduction

Dating violence (DV) refers to aggressive, or attempted aggressive, acts in the context of dating or romantic relationships, and can occur either in-person or electronically. These can be *physical* (using physical force to hurt someone); *sexual* (non-consenting sexual acts, sexual touching, or sharing and/or taking of sexual pictures/videos); *psychological* (acts intended to emotionally or mentally harm, including controlling behaviour, insults, or shaming); or *stalking* (repeated unwanted attention that is threatening and/or harassing) (Centre for Disease Control and Prevention, 2016, 2021). Suggested teen DV (TDV) prevalence varies; however, a 2017 meta-analysis found an average rate of 20% for physical TDV and 9% for sexual TDV for individuals aged 13–18 (Wincentak, Connolly & Card, 2017). Furthermore, those who experience TDV are at an increased risk of future dating, domestic and family violence (Molidor, 1995; Noonan & Charles, 2009; World Health Organization (WHO), 2014).TDV is associated with numerous detrimental consequences, including lower life satisfaction, depression, post-traumatic stress disorder (PTSD), binge-eating, substance misuse and an increased risk of suicidal behaviour (Banyard & Cross, 2008; Foshee et al., 2012; Offenhauer & Buchalter, 2011). It is estimated that between 51-75% of those who experience intimate partner violence will experience symptoms of PTSD, and between 48-70% will experience depression (Golding, 1999; Nathanson, Tirone & Rhatigan, 2012; Stein & Kennedy, 2001). Such detrimental mental health consequences are often exacerbated by long wait times to receive treatment (Royal College of Psychiatrists, 2020). There are also significant economic costs of treatment, and thus due to both personal and economic costs, there has been increased pressure to implement preventative measures for DV (McDaid et al., 2022). For example, the cost of school-based interventions vary, with reported costs ranging from £5823 per school to £121 per person (Luo, DeGue & Le, 2022; Stanley, Ellis, Farrelly, Hollinghurst, Bailey & Downe, 2015), whereas a review found the

average PTSD intervention to cost the healthcare system £36,000 per individual (Bothe, Jacob, Kröger & Walker, 2020).

Theoretical frameworks for TDV

There are a number of suggested theoretical frameworks for TDV; in particular feminist theory and attachment theory.

Feminist theories consider gender to be socially constructed, with different genders associated with certain behaviours, attitudes and power differentials (Becker, Kafonek & Manzer, 2021; Dobash & Dobash, 1979; Lawson, 2012). It proposes that within society, men hold more positions of power and control than women, across multiple contexts, including politically and financially. This increased power and gendered role expectation to be 'masculine', can lead to dating violence as a misuse of power by men, to enable the exertion of control and dominance over women (Becker, Kafonek & Manzer, 2021). This is particularly relevant when considering TDV, given that it has been found that gendered norms are prevalent by adolescence, and used as guidance of how to behaviour in relationships (Jewkes, Flood & Lang, 2015; Moreau et al., 2019) and identification with such norms can be a risk factor for TDV (Reyes, Foshee, Niolon, Reidy & Hall, 2016). It is suggested that interventions during adolescence could interrupt the internalisation of unhelpful gender norms, before they manifest into detrimental behaviour (Blum, Astone, Decker & Mouli, 2014). It is imperative to acknowledge the limitations of feminist theories. In particular they emphasise men as perpetrators of violence against women, however, men are also survivors of IPV, and are feminist theories are limited in their inclusion of different gender identities and intersectionality; therefore it is important feminist theories are not considered in isolation in understanding TDV (Acker, 1987; Collins, 2022; Mills, 2009)

TDV can also be understood through attachment theory (Ainsworth, 1969; Bowlby, 1982). Attachment theory proposes that during infancy creating a bond with a primary

caregiver is essential for survival, and one must rely on them to create a safe space, and respond to physical and emotional needs. Infants whose caregivers provide this consistently develop secure attachments with the caregiver, however an inconsistency or absence of this can result in an insecure attachment and difficulties in forming trust with others. This early attachment style then serves as a framework for one's expectations of self and others in future relationships, including romantic relationships (Ainsworth, 1969; Bowlby, 1982). Insecure attachment styles have been linked with increased DV across social groups and genders (Bonache, Gonzalez-Mendez & Krahé, 2017; Dutton & White, 2012). Individuals with insecure attachment styles have been suggested to use violence as a means of gaining security and control within a relationship (Godbout, Dutton, Lussier & Sabourin, 2009; Mikulincer & Shaver, 2003). Therefore the need to educate individuals on constructive communication patterns for meeting one's needs in a relationship have been emphasised (Bonache, Gonzalez-Mendez & Krahé, 2017). This is particularly important in adolescence, as this period has been hypothesised as an opportunity for reorganisation of one's attachment system as individuals may have their first experiences of romantic relationships during this time (Rosenthal & Kobak, 2010)

Adolescent learning and development

Adolescence is a crucial developmental period in the context of first romantic relationships (Hébert et al., 2014), providing a foundation for future intimate relationships (Stöckl, March, Pallitto & Garcia-Moreno, 2014) and skill building for long-term partnerships (Fisher, Gardella & Teurbe-Tolon, 2016). Developmental cognitive neuroscience models have shown that during adolescence, the production of reproductive hormones leads to a reorganisation of the brain, during which it is particularly receptive to new learning (Konrad, Firk & Uhlhaas, 2013; Somerville, Jones & Casey, 2010). It is proposed that increases in sexual hormones during adolescence alters neural responses to

rewards, and thus increases the likelihood of risk-taking behaviours, as well as increasing the drive for romantic relationships. These combine to increase the likelihood of risk-taking in relationships (Braams, van Duijvenvoorde, Peper & Crone, 2015; Ellis et al., 2012). Therefore, adolescence presents a unique opportunity for TDV interventions, due to both the brain's increased receptiveness to new learning, and an increased interest in romantic relationships.

Given the number of adolescents and young adults that experience DV, it has been emphasised that there is a need for prevention efforts to start before adulthood (Mulford & Blachman-Demner, 2013). However, according to the WHO (2014), relationship violence prevention has received insufficient investment and commitment, and has been identified as a key issue to address (WHO, 2013;2014).

School-based interventions

Numerous school-based TDV prevention strategies exist; however these vary in delivery, and effectiveness (Piolanti & Foran, 2022). Delivery methods include lessons, theatre productions, posters and school policies, and can be implemented school-wide or targeting specific individuals (Taylor, Stein, Mumford & Woods, 2013). Content varies again, including material on, but not limited to, education on the consequences of dating behaviours, recognising abuse, encouraging bystander support (taking action when witnessing TDV), and teaching skills to support healthy relationships such as how to manage conflict (Foshee, Bauman, Ennett, Suchindran, Benefield & Linder, 2005; Hampton, Brinberg, Peter & Corus, 2009).

The effectiveness of a TDV prevention programme can be measured by the actual the incidence of DV and bystander behaviour, and also its ability to change knowledge, attitudes and intentions, as these elements have been associated with changes in behaviour (Ajzen, 1991; Bettinghaus, 1986).

Researchers have highlighted the importance of theory-driven interventions; these are interventions that explicitly state the theoretical model underpinning the intervention, as well as how this links to potential causal outcomes (Michalos, 2014). Having a theory-driven intervention is crucial in determining the ethics of putting participants through an intervention programme, by being able to ensure a clear rationale for the potential effectiveness. It also enables researchers not just to evaluate outcome measures, but also the potential mechanisms of change, and thus more effectively target and refine interventions (Michalos, 2014; Sidani & Sechrest, 1999).

Previous reviews

The most recent review on this topic is that by Lee & Wong (2021) who included 38 studies, covering publications from 1997 to 2019. However, this review was not limited to interventions conducted within a school setting. Furthermore, for those that were school-based, the education system varied significantly from 1997-2019, making it difficult to generalise these results to the modern education system (Sandals & Bryant, 2014). This review includes interventions situated within Western countries only; however, research indicates the rate of relationship violence is as high or higher in many non-Western countries (WHO, 2012). Finally, it included a number of non-peer reviewed articles, which may compromise the quality of the included research; the quality of the included papers is unclear, as this was not comprehensively analysed. The overlap of papers in the current review, and that of Lee and Wong (2021) is 60%.

Carlos et al (2017) and De La Rue, Polanin, Espelage, Pigott (2017) investigated school-based interventions for TDV; however, the latter included only middle schools, and the former included university programmes with individuals up to the age of 24. They also do not include any publications post-2015. Other relevant reviews include Piolanti & Foran (2022) and Russell, Voith & Lee (2021); however these differ significantly from the current

review as they were either not restricted to school-based interventions, included randomised control trials only, focused on psychological DV only, or included only perpetration or victimisation as an outcome measure.

Overall, the reviews have found interventions to show some effectiveness in changing outcome measures of DV knowledge and DV attitudes (Lee & Wong, 2021, De la Rue et al). However, there has been debate on whether these programmes decrease outcome measures of DV victimisation and perpetration rates, with some reviews suggesting an uncertainty of effectiveness in these areas (Lee & Wong, 2021, De la Rue et al., 2017, Carlos et al., 2017), whilst others suggest interventions are effective for changing DV victimisation and perpetration rates (Russell, Voith & Lee, 2021).

Despite the importance of interventions being underpinned by theory, to date no review has addressed whether these interventions are informed by theory.

Contributions of the review

Given the detrimental impacts of TDV, and the financial and time constraints of implementing school-based prevention programmes, it is crucial to understand which are most effective (Anderson et al., 2011). The evidence base for school-based TDV prevention is growing. At present, there is a gap in the consolidation of the most up-to-date evidence base across the world, particularly since 2015. Given the need to implement programmes before adulthood, and TDV being a universal issue, it is important to consolidate the understanding of the most effective school-based prevention programmes worldwide. There has been an increased pressure on education systems to implement effective TDV prevention measures, particularly given the rise in media attention following recent disclosure of school-based peer-to-peer sexual abuse (Ofsted, 2021), and teachers indicating they are unaware of how to best prevent this (BBC, 2021). This review aims to support this by focusing solely on

school-based interventions. Given the rapidly changing nature of the education system and the gaps in previous reviews, it focuses on publications from 2015 onwards.

This review will be the first review to the authors' knowledge to assess whether TDV interventions are theory-driven. Furthermore, a number of the reviews in this area do not include comprehensive assessments of the quality of the research, and therefore this will be embedded within this review.

Overall, the current review seeks to answer the following questions for school-based interventions worldwide from 2015 to present: i) what do school-based interventions to prevent TDV focus on; ii) are they theory-driven; and iii) are school-based interventions to prevent TDV effective?

Method

In line with recommended guidelines (Moher et al., 2015) the current review was registered with PROSPERO (reference: CRD42021275521) on 29th September 2021. The study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021). A literature search was conducted on OVID (including Embase, PsychInfo, MedLine), Scopus and CINAHL on the 21st June 2021 and updated on the 18th February 2023.

Search terms included a combination of key words and terms associated with 'school', 'intervention', 'dating violence' and 'teen' (see Appendix 1.A for search strategy). Review articles were hand-searched to identify additional relevant studies.

Inclusion and exclusion criteria

Studies were included if they implemented a DV intervention within a school. Where the programme was conducted in multiple settings, if results were given separately for the school-based interventions, these studies were included. To be included, there must have

been an explicit aim for the intervention to reduce DV, even if these were part of a program targeting multiple areas (e.g. peer-to-peer violence, HIV prevention, academic achievement etc). The intervention outcomes were required to have at least one quantitative pre and post measurement of the following: attitude towards DV; skills for reducing DV; DV knowledge; and frequency of DV perpetration or victimisation. Participants receiving the programme were required to be between the ages of 10-20 (inclusive). Where age was not specified, the school year (if provided) was used as an indication of age. Studies were required to have been published from 2015 (inclusive) and onwards, have a version in English, and be peer reviewed.

Studies were excluded if they were conducted in a university or within a specialist school for individuals with additional learning needs. Studies which were qualitative only, systematic reviews, books, grey literature and dissertations were excluded. Studies were excluded where they were reporting on duplicate data of a study already included; where this was the case, the study reporting the largest number of DV outcomes was included.

Quality assessment

The Standard Quality Assessment Criteria for appraising research papers (Kmet, Cook & Lee, 2004) was used to evaluate the quality of all papers included in the review. This consists of 14 questions, assessing methodological quality and bias. Each paper was individually marked against the 14 criteria to obtain an overall quality score which was given as a percentage. Based on previous research, a score of more than 80% was taken to indicate excellent quality, 60-79% to indicate good quality, 50-59% to indicate average quality and less than 50% to indicate poor quality (Heilbronn, Doma, Sinclair, Connor, Irvine-Brown & Leicht, A. 2022; Lee et al., 2020; Remijn, Sanchez, Heijnen, Windsor & Speyer, 2022). A second researcher independently assessed 30% of papers against the checklist, Cohen’s

Kappa (Cohen, 1960) was calculated and indicated an 'almost perfect' level of agreement (κ = .82) (McHugh, 2012).

Data extraction and synthesis

Data was systematically extracted using a data extraction sheet designed for the purposes of this review (see Appendix 1.B). The data extracted included authors; publication year, geographical location, school type, study design, sample size, participant demographics, intervention name, intervention delivery (length, who by and if training was required), intervention focus, DV outcome measures, results for DV outcomes and effect size.

For the intervention focus, there were large differences between the included papers in terms of the amount of detail given on the topics covered in their intervention. Based on a detailed assessment which involved reading and re-reading the interventions multiple times and agreement with the second researcher; 17 topics of focus were identified. Each intervention was then assessed to see which of these topics were included.

If effect size was not stated, these were calculated, where possible, using Lakens' (2013) formula for calculating effect sizes. Alternatively, odds ratios, or f^2 values were taken as an indication of effect size (Chen, Cohen & Chen, 2010; Cohen, 2013).

A second researcher independently extracted the data from 50% of the total number of papers; Cohen's Kappa (Cohen, 1960) indicated the proportion of agreement being 'almost perfect' (κ = .95).

Results

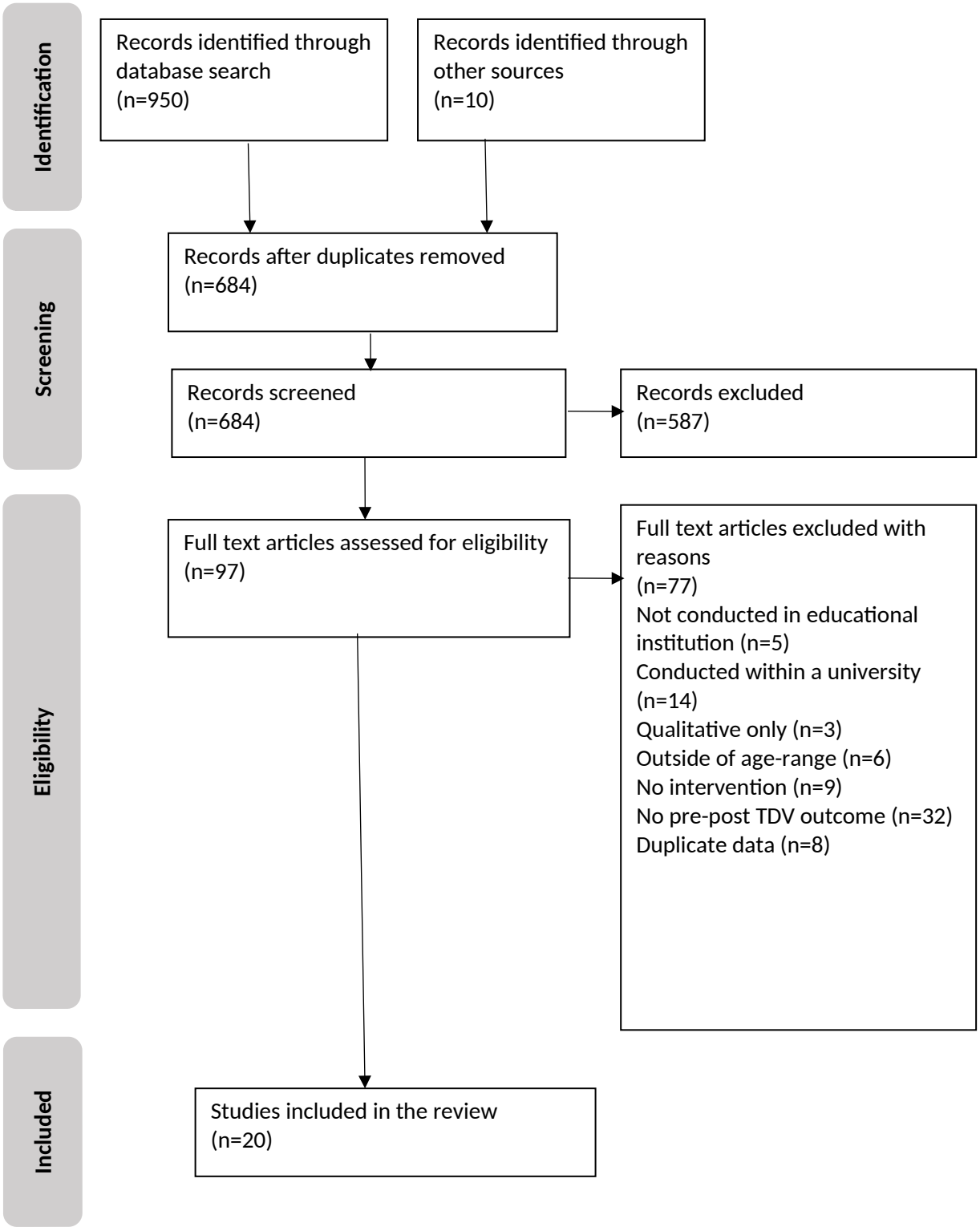
Study selection

The search identified a total of 950 studies, and 10 studies were identified from other reviews. After removing duplicates, 684 articles were screened using their title and abstract. A second researcher screened 20% of the 684 papers; Cohen's Kappa (Cohen, 1960)

indicated an almost perfect level of agreement (κ = .81). Of the 97 articles eligible for full-text screening, 25% of these were screened by the independent researcher, with Cohen's Kappa indicating almost perfect level of agreement (κ = .84). Of the 97 articles, 20 met the criteria to be included in the review (see Figure 1 for a flow chart of the screening process).

Figure 1

PRISMA flowchart of the study selection process.



Note. For each excluded paper for which the full article was assessed, the reason noted for exclusion is the first reason identified by the author that met the exclusion criteria. It is possible that some of the papers would have met multiple exclusion criteria.

Study and participant characteristics

Table 1 shows information regarding the study and participant characteristics. The majority, 70%, of studies were conducted in the United States of America (USA). With the remaining 30% being in South Africa, Mexico, Philippines, Spain, and the Netherlands. A Randomised Control Trial (RCT) design was employed in 75% of studies. The majority of interventions, 65%, specified that they were conducted in high schools, 15% specified being in middle schools, and the rest did not specify the type of school. 55% of schools specified that they were public schools, whilst the rest did not specify a public or private status.

There were a total of 39157 students across all included studies. The numbers included in each study ranged widely, from 82 to 16242. Overall, except one study where there were only males (de Graaf et al., 2016) , there was a relatively even split between male and females, with 47% of students across the remaining studies which reported gender being male. Where reported, mean ages ranged from 12.2 to 16.2 years, with an average age of 14.3 years.

Ethnicity and race was challenging to synthesise due to the lack of consistency in the categories used to report this, and that race and ethnicity were often reported in combined categories. Overall, where race or ethnicity were reported, studies most commonly reported the highest proportion of students being Hispanic, (40% of studies), followed by White (20% of studies). 20% of studies did not report race or ethnicity.

It should be noted that in the data analysis, five studies included only students who had dating experience, or indicated that they were actively dating.

Three studies specified that students or schools were selected based on having low-social economic status or household incomes.

Table 1

Study and participant characteristics.

ID*	Study	Location	Design	School Type	Participants		Inclusion/Exclusion
1	Coker et al. (2017)	Kentucky, US	Cluster RCT	Public high Schools	Control 13 schools. N = 8,143, M = 45.9%, White = 87.2%	Intervention 13 schools, N = 8,099, M = 45.4%, White = 82.5%	Exclusion: schools with <100 per grade.
2	de Graaf, de Haas, Zaagsma & Wijsen (2016)	Netherlands	Quasi-experimental trial	Pre-vocational schools	Control N = 261, M(age) = 15.0(SD = 1.1), M = 100%, Dutch = 69.9%, Moroccan or Turkish = 9.3%, Surinam or Antillean = 6.2%, other Western nationality = 6.6%, other non-Western nationality = 8.1%	Intervention N = 260, M(age) = 15.2(SD = 1.4) M = 100%, Dutch = 57.5%, Moroccan or Turkish = 12.0%, Surinam or, Antillean = 6.2, other Western nationality = 10.4%, other non-Western	Exclusion: schools with comparable programmes.

						nationality = 13.4%	
3	Gonzalez-Guarda, Guerra, Cummings, Pino & Becerra (2015)	Florida, US	RCT	Public school	<u>Control</u> N = 41	<u>Intervention</u> N = 41 M(age)[a] = 14.3(SD = 7), Hispanic[a] = 100%	Inclusion: age 13-16, be in 9th grade, self-identify as Hispanic.
4.	Goesling & Alamillo (2023)	Atlanta, US	Cluster RCT	Public high schools	<u>Control</u> N = 517, M = 53% Hispanic = 57%, Black (non-Hispanic = 24%, White (non-Hispanic) = 5%, Multiracial/other = 14%	<u>Shortened Intervention</u> N = 552, M = 51%, Hispanic = 56%, Black (non-Hispanic = 25%, White (non-Hispanic) = 6%, Multiracial/other	<u>Full Intervention</u> N = 513, M = 52%, Hispanic = 57%, Black (non-Hispanic = 26%, White (non-Hispanic) = 5%, Multiracial/ other = 13%

					= 14%			
5	Jewkes, Gevers, Chirwa, Mahlangu, Shamu, Shai & Lombard (2019)	Pretoria, South Africa	Cluster RCT	High schools	Control[b] N = 1031, age 12-13 = 47.6%, age 14-15 = 44.9%, age 16-19 = 7.5%, M = 42.3%, African = 88.5%, other = 11.5%	Intervention-1[b] (school only) N = 1355, age 12-13 = 49.8%, age 14-15 = 45.3%, age 16-19 = 4.9%, M = 43.0% African = 93.4%, other = 6.6%	Intervention-2[b] (school and family) N = 1371, age 12-13 = 53.5%, age 14-15 = 42.8%, age16-19 = 3.6%, M = 44.8%, African = 91.8%, other = 8.2%	Inclusion: only those with dating experience included in analysis. Exclusion: high fee-paying schools, elite state schools.
6	Joppa, Rizzo, Nieves & Brown (2016)	Massachusetts, US	Cluster RCT	Public high school	Control[c] 11 classrooms, N = 139, M(age) = 15.9(SD = .9), M = 43%, non-White = 30%,		Intervention[c] 11 classrooms, N = 86 M(age) = 15.9(SD = .9), M = 51%, non-White = 32%,	Inclusion: delivered to all in class, but analysis only included ‘active

					Hispanic = 23%	Hispanic = 16%	daters'.
7	Jouriles, McDonald, Rosenfield & Sargent (2019)	Southern State, US	RCT	Public high schools	<u>Control</u> N = 80, M(age)[a] = 15.7(SD = 1.1), M[a] = 48.5%, Hispanic = 57.1%, Black = 5.4% Asian = 1.8%, Native Hawaiian or Other Pacific Island = 0.0%, Black or African American = 37.5%, White = 25.0%, Multiracial = 17.9%, unknown = 12.5%	<u>Intervention</u> N = 85, M(age)[a] = 15.7(SD = 1.1), M = 48.5% [a], Hispanic = 49.4, Black = 3.0, Asian = 4.5%, Native Hawaiian or other Pacific Islander = 1.5%, Black or African American = 45.5%, White = 21.2%, Multiracial = 16.7%, unknown = 17.6%	Inclusion: low-income schools. Exclusion: students scheduled to graduate before follow-up.
8	Levesque, Welch, Prochaska & Paiva (2016)	Rhode Island, US	Cluster RCT	High schools	<u>Control</u>[c] N = 1216, M = 46.3%, White, non-Hispanic = 76.1%, other = 23.9%	<u>Intervention</u>[c] N = 1389, M = 47.7%, White, non-Hispanic = 82.2%, other = 17.8%	Inclusion: delivered to all in class, but analysis only included those

							deemed at risk of DV.
9	Madrid, Lopez, Dans, Fry, Duka-Pante & Muyot (2020)	Manilla, Phillapenes	Within groups repeated measures	Public high schools	2 schools, N = 1458		
10	Mathews et al. (2016)	Western Cape, South Africa	Cluster RCT	Public high schools	<u>Control</u> N = 1519, M(age) = 13.7(SD = 1.1)	<u>Intervention</u> N = 1515, M(age) = 13.7(SD = 1.0)	Exclusion: schools with grade 12 pass rates below 40 % and above 97%. Schools more than a 3 hour drive from Cape Town. Schools participating in HIV

							prevention trials.
11	McLeod, Jones & Cramer (2015)	South-eastern State, US	Within group repeated measures experimental design	High schools	N = 292, age 14 = 51.4%, age 15 = 34%, Over 16 = 9.6%, M = 58%, African American = 39%, Caucasian = 36%, Multi-racial = 13%, Hispanic/Latino = 8%, other = 10%		Inclusion: students at risk of low academic achievement.
12	Miller et al., (2015)	California, US	Cluster RCT	Not specified	<u>Control</u> N = 526, age = 14-19 M = 23.3%, Asian = 16.5%, African American = 24.8%, Hispanic/Latina/Latino = 38.8, Native	<u>Intervention</u> N = 505, age = 14-19, M = 24.2% Asian = 14.3%, African American = 29.5%, Hispanic/Latina/Latino =	

					American/Pacific Islander = 4.7%, White = 4.8%, Multiracial/other = 10.5%	33.9%, Native American/Pacific Islander = 5.7%, White = 5.5%, Multiracial/other = 11.1%	
13	Muñoz-Fernández, Ortega-Rivera, Nocentini, Menesini & Sánchez-Jiménez (2019)	Andalusia region, Spain	Cluster RCT	High schools	<u>Control</u> 3 schools, N = 866, M(age) = 15.0(SD = 1.5), M = 50.5%	<u>Intervention</u> 4 schools, N = 557, M(age) = 14.9(SD = 1.3), M = 53.8%	Inclusion: students currently dating or having previously dated.
14	Peskin et al. (2019)	Texas, US	Cluster RCT	Middle schools	<u>Control</u> N = 271, M(age) = 12.3(SD = 1.4), M = 44.5%, African American = 25.5%, Hispanic = 67.2%, other =	<u>Intervention</u> N = 438, M(age) = 12.2(SD = 1.4), M = 47.5%, African American = 18.3%, Hispanic =	

					7.4%	73.5%, other = 8.2%	
15	Reidy, Holland, Cortina, Ball & Rosenbluth (2017)	Texas, US	Between groups repeated measures experimental design	Not specified	<u>Control</u>[b] N = 574, M(age)[a] = 14.3(SD = 1.6) M = 38.7, Latino/Hispanic = 43.9%, African American = 20.6%, White = 13.0%, Multiracial = 16.2%, other = 4.9% Unknown = 1.4%	<u>Intervention</u>[b] N=756, M(age)[a]=14.3(SD=1.6) M=40.7%, Latino/Hispanic = 56.1%, African American = 14.4%, White = 12.7%, Multiracial = 11.1%, other = 3.6%, unknown = 1.0%	Inclusion: only those who endorsed history of violence exposure or dating in the preceding three months included in the analysis. Exclusion: students deemed to need more significant care.
16	Sargent, Jouriles, Rosenfield & McDonald (2017)	US	Cluster RCT	Public high school	N[a] = 1295, M(age)[a] = 15.3 (SD = .9), M[a] = 47.5%, Hispanic = 72.3%, non-Hispanic[a] = 18.0%, Black[a] = 1.4%, Multiracial[a] = 1.2%, Asian[a] = 0.8%, Other[a] = .5%, White[a] = .3%, American Indian/Alaska Native[a] = .1%, unknown[a] = 5.5%		Inclusion: students from economically disadvantaged backgrounds.

17	Scull, Dodson, Geller, Reeder & Stump (2022)	Across the US	Cluster RCT	Public high schools	Control 8 schools, N = 374, M(age) [a] = 14.4(SD = .7), M = 47.5%, American Indian = 1.60%, Asian = 11.6%, Black = 24.5%, Pacific Islander/Native Hawaiian = 0.0%, White = 37.6%, Multiracial = 22.8%, Hispanic/Latino = 13.9%, non-Hispanic/Latino = 86.8%	Intervention 9 schools, N = 216, M(age) [a] = 14.4(SD = .7), M = 40.6%, American Indian = 0.3%, Asian = 6.0%, American Black = 10.2%, Pacific Islander/Native Hawaiian = 0.3%, White = 68.8%, Multiracial = 14.5, Hispanic/Latino = 12.6%, non-Hispanic/Latino = 87.4%
18	Scull, Kupersmidt, Malik & Morgan-Lopez	South Eastern US	Cluster RCT	Middle schools	Control 4 schools, N = 301, M(age) = 13.0, M = 51.1%, Black/African American =	Intervention 5 schools, N = 602, M(age) = 12.8 M = 51.2%, Black/ African American = 7.9%,

	(2018)				13.0%, White/Caucasian = 59.3%, American Indian/Alaska Native = 1.3%, Asian/Pacific, Islander = 2.3%, Multiracial = 12.7% other = 11.4%	White/Caucasian = 66.3%, American Indian/Alaska Native = 3.3%, Asian/Pacific Islander = 3.3%, Multiracial = 7.4%, other = 11.8%	
19	Sosa-Rubi, Saavedra-Avendano, Piras, Van Buren & Bautista-Arredondo (2017)	Mexico city, Mexico	Between groups repeated measures	Public high schools	Intervention-1 (school climate component (SSC) only) N = 504, M(age) = 16.2, M = 56.4%	Intervention-2 (SSC and individual level component (SSC-IL)) N = 381, M(age) = 16.0, M = 56.2%	Inclusion: school located in localities of low socioeconomic status.
20	Temple,	Texas,	Cluster	Public	Control[c]	Intervention[c]	Inclusion: delivered

Baumler, Wood, Thiel, Peskin & Torres (2021)	US	RCT	middle schools	N = 606, M = 51.5% , Hispanic = 44.1%, non-Hispanic White = 6.9%, non-Hispanic Black = 27.1%, Asian American = 5.6%, Multiple = 4.5%, other = 11.9%	N = 413, M = 49.2% , Hispanic = 39.2%, non-Hispanic White = 3.1%, non-Hispanic Black = 44.4%, Asian American = 8.2%, Multiple = 5.8%, Other = 9.2%	to all in class, but DV outcome analysis only included those who reported having a relationship in the past 12 months.

Note. Where possible data is reported to one decimal place. Data regarding location, study design, type of school, participant numbers, participant age, participant race and/or ethnicity and exclusion criteria is given where this was reported.

ID = study identifier number. N = number of participants. M = male. M(age) = mean age of participants. SD = standard deviation. RCT = Randomised Control Trial.

[a]Data has been combined across all conditions.

[b]Data is given for all those who received the intervention. However, the analysis of DV outcomes only includes those who had experience of dating, for which no specific demographic information for this group alone was given.

[c]Data for participants included in the DV outcome data analysis only.

Study quality

Information regarding the study quality is displayed in Table 2. Overall the quality of the included studies was high, with 18 of the 20 papers indicating an ‘excellent’ quality, and two ‘good’ quality. The papers scored between 75-100% on the Kmet Checklist (Kmet et al., 2004), with the average score being 91%. The greatest area of strength in the quality of the papers were that all studies sufficiently described both the objective of the study and the analyses used, and that analyses appeared appropriate. Other areas of relative strength included a clear study design, and clear descriptions of study characteristics. The greatest area of weakness was that for 50% of studies, the method of recruitment was only partially described, and whilst there was no obvious inappropriateness, it is not possible to determine whether potential bias was introduced from the recruitment methods. In particular, it was often not clear why or how certain schools had been chosen to participate. Another area of relative weakness, was that for those who stated using a randomised approach, only 45% stated the methods used for randomisation, and whilst again there was no obvious inappropriateness, it is not possible to determine whether potential bias was introduced during the randomisation process.

Table 2

Ratings using Kmet (2004) checklist of study quality.

Study ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Overall	%
1	2	2	1	2	1	N/A	N/A	2	2	2	2	2	2	2	22/24	91.7
2	2	2	2	2	1	N/A	N/A	2	2	2	1	2	2	2	22/24	91.7
3	2	2	1	2	2	N/A	N/A	2	1	2	2	2	2	2	22/24	91.7
4	2	2	2	2	2	N/A	N/A	2	2	2	0	2	2	2	22/24	91.7
5	2	2	2	2	2	N/A	N/A	1	2	2	2	2	2	2	23/24	95.8
6	2	2	2	2	1	N/A	N/A	2	1	2	2	2	2	2	22/24	91.7
7	2	2	1	2	1	N/A	N/A	2	1	2	2	2	2	2	21/24	87.5
8	2	2	1	2	2	N/A	N/A	2	2	2	2	2	2	2	23/24	95.8
9	2	2	1	1	N/A	N/A	N/A	2	2	2	0	1	2	2	17/22	77.3
10	2	2	2	2	2	N/A	N/A	2	2	2	2	2	2	2	24/24	100.0
11	2	1	1	2	N/A	N/A	N/A	1	2	2	2	2	2	2	19/22	86.4
12	2	2	2	2	2	N/A	N/A	2	2	2	2	2	2	2	24/24	100.0
13	2	2	2	2	2	N/A	N/A	2	2	2	2	2	2	2	24/24	100.0

14	2	2	2	2	2	N/A	N/A	2	2	2	2	2	1	2	23/24	95.8
15	2	2	1	2	N/A	N/A	N/A	2	2	2	2	2	1	1	19/22	86.4
16	2	2	1	2	1	N/A	N/A	2	1	2	1	1	2	1	18/24	75.0
17	2	2	2	2	2	N/A	N/A	2	1	2	2	2	2	1	22/24	91.7
18	2	2	1	2	1	N/A	N/A	2	2	2	2	2	2	1	21/24	87.5
19	2	2	1	2	1	N/A	N/A	2	2	2	2	2	2	2	22/24	91.7
20	2	2	2	2	1	N/A	N/A	2	2	2	2	2	2	2	23/24	95.8

Note. 0 = no, 1 = partial, 2 = yes

Q1 = Question or objective sufficiently described? Q2 = Design evident and appropriate to answer study question? Q3 = Method of subject selection or source of information/input variables is described and appropriate? Q4 = Subject characteristics or input variables/information sufficiently described? Q5 = If random allocation to treatment group was possible, is it described? Q6 = If interventional and blinding of investigators to intervention was possible, is it reported? Q7 = If interventional and blinding of subjects to intervention was possible, is it reported? Q8 = Outcome and exposure measure(s) well defined and robust to measurement / misclassification bias? Q9 = Sample size appropriate? Q = 10. Analysis described and appropriate? Q11 = Some estimate of variance is reported for the main results/outcomes? Q12 = Controlled for confounding? Q13 = Results reported in sufficient detail? Q14 = Do the results support the conclusions?

Intervention overview

Table 3 gives an overview of the intervention names and delivery. The 20 studies consisted of 18 different interventions, with the 'takeCARE' (Jouriles et al., 2019; Sargent et al., 2017) and Media Aware (Scull et al., 2018; Scull et al., 2022) interventions implemented in two studies each. However, despite being the same intervention, there were differences in the administration of Media Aware. Interestingly, only one of the Media Aware intervention studies found significant effects. This is despite both measuring attitudes towards DV, both training those delivering the intervention, and there not being any obvious differences in inclusion or exclusion criteria; they did however, differ in length and number of sessions. Therefore it is possible that how an intervention is delivered, such as the number of sessions, may be an important determinant of its effectiveness.

Six interventions were delivered by school staff only, two by project staff only, four were delivered by facilitators external to the project/school and five were a combination of external facilitators, school staff and students One intervention was delivered via students only. Apart from one study, all of these studies specified that some training was required to deliver the intervention. TakeCARE was administered in two of the studies, and was the only intervention which did not require any individual or training to administer, being administered via a pre-recorded video.

Where specified, the number of sessions ranged from one to 24 sessions. Whilst many specified the number of sessions, there was insufficient information in the papers to gain an overview of the duration and regularity in many of the studies. This limits the ability to give an overall idea of how much time the interventions would have taken to implement. There was variation in the detail given on the methods of delivery; however, all interventions reported a range of delivery methods, except the takeCARE intervention studies, which used a single video only. The most commonly reported methods were classroom presentations or

lectures, the use of videos, group discussions, physical booklets, handouts, and role playing. Less frequently cited methods included school clubs, a health check and poetry.

Table 3

An overview of the intervention names, who the interventions were delivered by, their method of delivery and length.

Study Name (ID)	**Delivered by /training required**	**Teaching methods/length***
Green Dot (1)	External facilitators/ TR	Schoolwide presentations, persuasive speeches and coaching (five hours) for a 'student leaders'.
Rock and Water (2)	School teachers/TR	DVD's, group discussions, assignments and physical exercise. seven-10, 60-90 minute sessions.
JOVEN (3)	Project staff/NS	Psychoeducation, skill-building activities, videos, music and group discussions. 6 group sessions.
RQ+ (4)	External facilitators/ TR	Lectures, full-class and small-group discussions, role-plays, workbooks and take-home assignments. 90 minutes lessons (12 lessons for full intervention, eight lessons for short intervention).
Skhokho (5)	Project staff/TR School teachers/TR	Learning booklet, discussions, role-plays, debates, videos, classroom web-based activities and school clubs (30 mins at breaktime).
KBEP (6)	Project Staff/TR	Lectures, group discussions, group and individual activities, handouts and worksheets. Five, 50-60 minute classes during a single week.
TakeCARE (7)	N/A	Video containing information and vignettes. One 26 minute video.

Teen Choices (8)	N/A	Web-based sessions (text, images, audio, video) completed on school computers and posters. Three, 25-30 minute sessions.
Not stated (9)	School teachers/TR	Classroom-based, scenario examples and mindfulness.
PREPARE (10)	Project staff/TR External facilitators/ NS	Worksheets, discussions, roleplays and access to health checks. 21, one to one and a half hour sessions delivered weekly. 20 students received an addition two, five hour sessions.
RELATE (11)	Student facilitators/TR	Lectures, skits, activities and self-assessments. Five, 50-60 minutes sessions over five weeks.
SHARP (12)	School staff/TR	Training slides, brochures, school-wide outreach events and resources.
Dat-e Adolescence (13)	Project staff/NS Two students/TR	Discussions, role plays, debates, watching videos, classroom and web-based activities, decision-making games and group exercises.
Me & You (14)	Project staff/TR School staff/TR	Role plays, group discussion, skill-building activities, group-based computer activities, animations, peer video role modelling, interactive quizzes and take home activities/news letters to share or complete with parents. 13, 25 minute lessons.
ERSG (15)	External facilitators/	Group sessions which included activities, discussions, educational videos, interactive games, role

	TR	plays and creative expression through art and poetry. 25, 60 minute weekly sessions.
TakeCARE (16)	N/A	Video containing information and vignettes. Less than 30 minutes.
Media Aware (17)	School teachers/ TR	Web based lessons over four-five, 45 minute classes.
Media Aware (18)	School teachers/TR	CDs, classroom presentations, web based lessons, student workbooks. 10 lessons.
True Love (19)	External facilitators/ TR	School-level component: one, four hour workshop. Individual component: smaller workshops consisting of sharing experiences, case studies, analysis of songs and videos, role-playing, theatre, study of personal and hypothetical situations. 16 weekly, one hour sessions. Schoolyard activities: posters and distributing flyers.
Fourth R (20)	School teachers/TR	Practising skills, discussions, role-play, written assessment. 24, 45 min sessions.

Note. Information was given where this was reported regarding the methods of delivery, the number of sessions and the length of each session. Where this information is not given; this could not be identified by the author within the paper.

JOVEN = Juntos Opuestos a la Violence Entre Novios (Together Against Dating Violence). RQ(+) = Relationship Smarts PLUS. KBEP = The Katie Brown Educational Program. RELATE = Relationship Education Leading Adolescents toward Empowerment. SHARP = School Health Centre Healthy Adolescent Relationships Program. ERSG = Expect Respect Support Groups (ERSG). TR = training required. NS = it was not specified if training was required.

Intervention focus

Table 4 provides an overview of the focuses of the interventions. All interventions focused on a number of topics. The most frequently reported topics covered in interventions were recognising behaviour that was either DV or a DV risk (70%), and understanding the characteristics of healthy relationships (70%). 60% included topics on how to appropriately communicate within a relationship; in particular, this often included how to be assertive if required. 50% covered skills and information to keep oneself safe from DV, gender norms, bystander principles and decision making in relationships. Personal values and goals, skills for managing conflict, information on increasing self-confidence and the use of media and technology in relationships were covered by 35-40% of interventions. Appropriate behaviour in a relationship, education on substance abuse, the law and consequences surrounding DV and information regarding sexual health and sexual consent were discussed by 25-30%. Identifying places within the school which presented a risk of DV was an activity completed in 15% of interventions. Overall, there was a considerable overlap in the topics covered by the interventions.

Table 4

Topics of focus in each included study.

Topic	**Study ID**																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Recognition of DV/DV risk	x		x			x	x	x	x	x	x	x	x	x	x	x				x
Keeping oneself safe from DV	x	x			x			x	x	x	x	x		x						x
Bystander principles	x						x	x	x		x	x	x			x	x			x
Appropriate relationship communication (including positive and assertive)		x	x	x	x	x				x			x	x	x		x		x	x
Appropriate relationship behaviour	x	x	x		x													x		
Substance abuse			x		x			x									x	x		x
Sexual and/or reproductive health				x	x					x							x	x		x

Consequences (including legal) of DV		x		x				x				x						x	x	
Media/technology in relationships		x	x		x							x				x	x		x	
Relationship decision making			x	x	x		x		x	x		x				x	x		x	
Characteristics of a healthy relationship		x	x		x		x	x	x	x	x	x	x	x		x	x		x	
Personal values and goals	x		x	x	x				x	x			x						x	
Gender norms		x		x	x			x	x				x	x		x	x	x		
Managing conflict		x	x	x	x							x	x	x				x		
Increasing Self confidence	x				x	x						x			x	x	x			
Sexual Consent						x							x	x	x				x	
Identifying places of risk within school		x										x				x				

Note. ‘x’ indicates that the paper specified that this topic was present within the intervention.

Theoretical framework

Table 5 outlines the different theories underpinning the interventions. For 40% of interventions, no theoretical framework was specified to have unpinned the intervention. Of the 60% that specify being informed by a theory, there was a wide variety of different theories specified. Additionally, studies varied from mentioning no theory underpinning the intervention, to mentioning up to four. The most frequently mentioned theory was Social Cognitive Theory (SCT) (Bandura, 2011) with four studies citing this, and a further study citing Social Learning Theory (SLT) (Bandura & Walters, 1977) – a closely related theoretical model. Both theories emphasise that learning occurs by an individual observing others; however, SCT is a more recent theory which added an emphasis on the influence of personal factors, such as one's attention and retention of the behaviour and ability and motivation to reproduce this (Bandura, 2011; Bandura & Walters, 1977). The next most common theory to have guided the interventions, was the Theory of Reasoned Action (Fishbein & Ajzen, 1977), which informed three of the interventions. Theory of Reasoned Action proposes that a person's behaviour is determined by their intention to perform the behaviour, and that this intention is influenced by their attitudes toward the behaviour, and what they believe others attitudes towards to behaviour to be. Each of the other theories were only mentioned once.

Table 5

The theoretical frameworks underpinning the interventions.

Intervention Name (Study ID)	Theoretical Framework
Green Dot (1)	Diffusion of innovation theory
Rock and Water (2)	None specified
JOVEN (3)	Eco-developmental theory; Social cognitive theory
RQ(+) (4)	None specified
Skhokho (5)	Education Theory
KBEP (6)	Social learning theory
TakeCARE (7)	None specified
Teen Choices (8)	The transtheoretical model
Not stated (9)	None specified
PREPARE (10)	The reasoned action framework; I-Change theoretical model
RELATE (11)	None specified
SHARP (12)	None specified
Dat-e Adolescence (13)	Dynamic developmental systems model
Me & You (14)	Intervention mapping theory; Social cognitive theory; Socioemotional learning theory; Socioecological

	model
ERSG (15)	Not specified
TakeCARE (16)	Not specified
Media Aware (17)	Elaboration likelihood model; Theory of reasoned action; Theory of planned behaviour; The message Interpretation process model
Media Aware (18)	Elaboration likelihood model; Theory of reasoned action; Theory of planned behaviour; The message Interpretation process model
True Love (19)	Behavioural theory
Fourth R (20)	Social cognitive theory

Intervention effectiveness

Table 6 outlines the results of each of the interventions on the DV outcome measures. There was a significant impact in at least one DV outcome measure for 14 of the 20 studies. The most frequently measured outcome measure was that of DV victimisation or perpetration (12 out of 20 studies included a measure of this), with 75% of interventions with this outcome measure, showing a reduction in victimisation or perpetration of at least one form of DV. Attitudes were an outcome measure in seven studies, and four showed significantly improved attitudes towards DV. Four studies measured DV knowledge with three of these demonstrating significantly increased DV knowledge. Two studies measured bystander behaviour, both showing significant increases in this outcome measure. Two studies measured healthy relationship skills, both showing significant increases in these skills.

For those interventions that were effective, there was no unanimous underpinning theory. However, all of those which specified that SCT or SLT underpinned the intervention, were effective in significantly changing at least one DV outcome measure.

Visual inspection of the data indicated no clear patterns between effectiveness and whether interventions were delivered by internal or external staff or peers, if training was required, delivery methods, type of school or inclusion criteria; however, a meta-analysis would be able to more accurately determine this.

Effect sizes, or information enabling the calculation of these were specified in 15 of the 20 studies. The majority of interventions which showed significant improvements in their DV outcome measures, had small effect sizes. Across all the 20 studies, only one study exhibited a large effect size.

Table 6

The DV outcome measures, results and effect sizes for each study.

Intervention Name (ID)	**DV Outcome Measure** [a]	**Measure Time Points**	**Results**	**Effect Sizes** [b]
Green Dot (1)	Psychological and physical DV perpetration and victimisation	BL, 1 year post BL, 2 years post BL, 3 years post BL, 4 years post BL	Those receiving the intervention showed no significant differences form BL to year 1 or year 2 on any DV outcomes. In year 3 the intervention condition showed reductions in psychological DV perpetration*** and victimisation*** and physical DV perpetration*** and victimisation***. In year 4 the intervention condition showed reductions in physical DV perpetration*** and victimisation*, but no significant reduction in psychological DV preparation or victimisation.	Not reported
Rock and Water (2)	Attitudes towards DV	BL, PI, 4-5 months PI	No significant intervention effect was found for changes in attitudes towards DV PI or at 4-5 months PI.	Medium
JOVEN (3)	Psychological and	BL, 1 week	No significant intervention effects were found for	Small-

	physical/sexual DV victimisation and perpetration	PI, 3 months PI, 12 months PI	psychological DV victimisation or perpetration, or physical/sexual DV victimisation or perpetration at either 1 week, 3 months or 12 months PI.	Medium
RQ(+) (4)	Perceived general relationship skills, perceived conflict management skills, disapproval of DV	BL, 12 months PI	No significant intervention effects were found for perceived general relationship skills, perceived conflict management skills or disapproval of DV at 12 months PI.	Not reported
Skhokho (5)	Incidence of IPV	BL, PI, 12 months PI, 18 months PI	No significant intervention effects found for incidence of IPV PI or 12 or 18 months PI for any intervention condition.	Not reported
KBEP (6)	Physical and emotional/verbal DV perpetration and victimization (BL+3 months only), attitudes towards male/female DV	BL, PI, 3 months PI	PI those in the intervention condition reported no significantly different attitudes towards female/male DV perpetration. PI, those in the intervention condition exhibited more DV knowledge***. At 3-months those who received the intervention had healthier attitudes towards female** and male*** DV perpetration, more DV knowledge** and were	Small-Medium

	perpetration, DV knowledge.		significantly less likely to have perpetrated** or been a victim*** of emotional/verbal DV. There were no significant differences in perpetration/victimisation of physical DV at any time point.	
TakeCARE (7)	Self-efficacy for intervening in the context of DV, self-reported bystander behaviour, observed bystander behaviour	BL, PI, 6 months PI	Students who viewed TakeCARE reporting greater self-efficacy than the control condition both PI* and 6 months PI*. Students in the intervention condition reported engaging in more self-reported bystander behaviour during the 6-month follow-up period than students in the control condition*, and there was more observed bystander behaviour PI** and at 6 months PI** time points.	Small-Medium
Teen Choices (8)	DV (emotional, physical) victimization and perpetration, healthy relationship skill use, rejection of DV attitudes	BL, 6 months PI, 12 months PI	At 6 months PI, the intervention condition was associated with reduced emotional DV victimization***, emotional DV perpetration*** physical DV Victimization**, physical DV perpetration*** and increased rejection of DV attitudes* and skill use***. At 12 months PI, the intervention was	Small

			associated with reduced odds of emotional DV victimization***, emotional DV perpetration***, physical DV victimization**, physical DV perpetration*** and consistent skill use**. There was no significant intervention effect for rejection of DV attitudes at 12 months.	
Not stated (9)	Knowledge on abuse and DV, frequency of emotional dating abuse	BL, PI	For those in the intervention condition, PI there was a decline in DV frequency***, emotional abuse** and an increase in knowledge on abuse and DV***.	Small
PREPARE (10)	IPV victimization and perpetration	BL, 6 months PI, 12 months PI	Participants in the intervention reported less IPV victimisation at 12 months*, but not at 6 months. There were no significant changes in IPV perpetration at 6 or 12 months.	Small
RELATE (11)	Attitudes and knowledge associated with healthy relationships	BL, PI	For the intervention condition, there was an improvement in attitude and knowledge scores*.	Not reported
SHARP (12)	Recognition of ARA and sexual coercion, intentions to intervene, knowledge and	BL, 3 months PI	At 3 months PI, intervention participants had greater recognition of sexual coercion*. At 3 months PI, there was no significant intervention effect for recognition of ARA,	Small

	use of ARA resources		intentions to intervene, knowledge/use of ARA resources.
Dat-e Adolescence (13)	Moderate and severe physical dating aggression perpetration and victimisation, sexual dating aggression and victimisation	BL, PI, 6 months PI	For the intervention group, at PI and 6 months PI there was a decline in moderate physical dating aggression perpetration*** and victimisation***, severe dating aggression perpetration*** and victimisation** and sexual dating aggression perpetration** and victimisation*. In the control group at PI and 6 months PI there was a significant decline in moderate physical dating aggression perpetration*, there were no significant differences across time for any of the other measures.	Small to medium
Me & You (14)	DV perpetration and victimisation	BL, 12 months PI	Odds of DV perpetration at 12 months were lower among intervention condition****. There was no significant intervention effect on the odds of DV victimisation.	Small
ERSG (15)	Perpetration and victimisation of controlling behaviours, physical TDV,	BL, 6 months PI, 12 months PI	There were no significant intervention effects for perpetration and victimization of controlling behaviours, physical TDV or sexual TDV at any time point.	Medium-large

	sexual TDV.			
TakeCARE (16)	Helpful bystander behaviour	BL, 3 months PI	Those in the intervention condition reported engaging in more helpful bystander behaviour at 3 months PI*.	Small
Media Aware (17)	Acceptance of DV	BL, PI	There was no significant intervention effect on participants acceptance of dating violence.	Small-moderate
Media Aware (18)	Acceptance of DV	BL, PI	The intervention conditions showed a reduction in the acceptance of DV norms**.	Small
True Love (19)	Experienced and perpetrated psychological, physical and sexual DV	BL, 2 weeks PI	SCC-IL and SCC female students exhibited no significant changes between BL and 2 weeks PI in psychological, physical or sexual DV either experienced or perpetrated. Male students in the SSC-IL and SSC showed no changes between BL and 2 weeks PI in experienced or perpetrated sexual DV or perpetrated physical DV. SSC male students also showed no change in experienced or perpetrated psychological DV. Male students in the SSC-IL condition reported reductions in experienced** and perpetrated** psychological DV. Both SCC-IL* and SCC* males showed	Small-large

			reductions in experienced physical DV.	
Fourth R (20)	Perpetration of physical ARA	BL, 12 months PI	Those in the intervention condition were less likely to report perpetrating physical ARA*.	Small

Note. BL = Baseline, PI = Post Intervention.

*p = <.05, **p = <.01 ***p = <.001 ****p value not indicated.

ARA = Adolescent Relationship Abuse. DV = Dating Violence. TDV = Teen Dating Violence. IPV = Intimate Partner Violence. SSC = School Component Only. SSC-IL = School and individual level component.

Outcome measures where collected at each time point, unless otherwise specified. Effect sized based on the values given for Cohen's d, odds ratios or f^2. Values for Cohen's d were interpreted based upon small effect size = .2, medium effect size = .5, large effect size = .8 (Cohen, 2013). Values for odds ratios were interpreted as small effect size = 1.68, medium effect size = 3.45, large effect size = 6.71 (Chen, Cohen & 2010). Values for f^2 were interpreted as small effect size = .02, medium effect size = .15, large effect size = .35 (Cohen, 2013).

Discussion

This systematic review aimed to address a gap in the literature by synthesising information from the past eight years on school-based interventions to prevent TDV, from across the world. It reviewed what the interventions focused on, whether they were theory-driven, and their effectiveness.

The focus of the interventions covered a broad range of topics, particularly recognising DV and characteristics of healthy relationships. However, the ability to synthesise this information was limited by the large variation in the amount of intervention detail given. For example, some interventions covered up to 14 topics; however, it was frequently unclear how much time was spent on each topic, how individual topics were delivered, and the depth in which they were covered. Therefore, it is possible that some of the interventions covered more topics but did not explicitly state this in the paper, since their intervention descriptions were brief. Additionally, some of the interventions targeted multiple areas; such as HIV prevention, general assault or bullying as well as DV. Therefore, it is unclear what the relative impact and importance of different combinations of DV topics are, and the impact of their delivery in conjunction with non-DV topics; more research is needed to establish this. This limits the ability to refine and replicate the focus of future interventions.

With regards to whether the interventions were theory-driven; whilst 60% of interventions explicitly stated that they were informed by a particular theory or theories, it is also possible that some interventions were theory-driven but this was not explicitly stated. For those that were theory-driven, this importantly helps to inform the mechanisms of change (Michalos, 2014; Sidani & Sechrest, 1999). SLT (Bandura & Walters 1977) and SCT (Bandura, 2011) underpinned five of the interventions; all of these found significant results. This suggests that

interventions which utilise learning through observing others may be particularly impactful. However, there are also a number of possible mediating factors (such as length of intervention or who it is delivered by etc; Kuyken et al., 2022), and more research is needed to establish the relative impact of different factors. A number of interventions referenced being informed by more than one theory, which limits the ability to be able to discern exactly which mechanisms of change might be the most important. Furthermore, some interventions which caused significant change to DV outcome measures cited unique theories (guiding their intervention only) such as 'diffusion of innovation' theory (Coker et al., 2017), or the 'eco-developmental theory' (Gonzalez-Guarda et al., 2015). However, one study alone is not sufficient to conclude this is an appropriate theory to underpin DV interventions, and replication is needed to determine the reliability of these theories for effectively changing DV outcome measures, and thus the potential benefit of using the theories to guide the development of future TDV interventions.

Overall, 70% of interventions were found to have a significant impact on at least one DV outcome measure, however, the majority of studies yielded small effect sizes. It is possible that this is a result of the large sample sizes utilised (Schäfer & Schwarz 2019). Nonetheless, it is crucial to interpret effect sizes in context (Ellis, 2010). For example, Abelson (1985) emphasised the importance of the cumulative impact of a small effect size, particularly for a behaviour or situation that might be encountered a number of times or reach a number of individuals; as is the case with relationships and delivering the intervention in a school setting which can reach a large number of individuals at once. Therefore, despite the small effect size, given the cumulative impact, school based TDV interventions may still be worthwhile. Additionally, a school intervention targeting many, has been estimated to be less costly than an a single individual intervention to treat the psychological consequences of TDV (Bothe et al., 2020; Luo, DeGue & Le, 2022; Stanley et al., 2015). However, there was

limited information about the costs of the interventions in the study, and therefore it would be beneficial for future research to clarify this, in order to better estimate economic feasibility and overall cost-benefits.

Despite a number of interventions being effective, the mechanisms by which they are effective remain unclear. For example, two studies implemented the same intervention (Media Aware), however, only one of them yielded significant results. Therefore, more research is needed to determine what factors influence the effectiveness of the intervention. This also reiterates the need to repeat the interventions to validate the findings, something particularly important given that for the majority of these interventions, it was the only time they had been delivered. This is in line with the recent large scale mindfulness intervention, My Resilience In Adolescence (MYRIAD) which was implemented across a number of schools, and which found that the quality of the teaching students received, impacted the effectiveness of the intervention (Kuyken et al., 2022). This echoes the need for better clarification of how the interventions were delivered, the fidelity and consistency of those delivering them, and more details on what was taught. In addition to this, it should be noted that both the takeCARE intervention studies were effective, and this was the only intervention to specify that training was not required (as it was delivered via a video). TakeCARE also required the least amount of time to deliver; less than 30 minutes. This is of particular interest as the lack of training required, and shorter time commitment could make this more accessible to a wider number of schools and therefore students. Furthermore, the video delivery may result in less potential variance in teaching quality. Therefore, it is recommended that this be repeated across different groups of students, to establish the positive outcomes, and that more research is conducted into video-delivered short-scale TDV interventions.

This review found that 75% of interventions measuring knowledge and 57% measuring attitudes showed significant changes in outcome measures. This did not appear dissimilar to the outcome measure of perpetration/victimisation, for which 75% showed significant change. This differs from previous reviews which suggested that TDV interventions were particularly effective for changing attitudes and knowledge, whereas measurements of victimisation and perpetration rates showed less change (Lee & Wong, 2021, De la Rue, 2017, Carlos et al., 2017). It may be that this can be explained by the difference in included studies; worldwide, only school-based and exclusively within the ages of 10-20. It may also be explained by this review including more recent studies, and such studies being more effective in these areas. However, DV victimisation and perpetration rates may also be influenced by when the measures were taken post intervention. In order to better establish the effectiveness for changing DV behaviour, it is recommended future research has larger follow up periods, thus increasing the likelihood that individuals will have experienced romantic relationships during this time and thus exhibit any potential impacts of the intervention. A limitation of the included studies is that the majority of the interventions did not include a follow-up post 12 months; therefore, not only does it make it more difficult to assess the impact on actual TDV rates, it also limits the ability to determine the effectiveness of the interventions in the longer-term.

Strengths and limitations

To the authors' knowledge this is the first systematic review to examine whether school-based TDV interventions are theory-driven. Furthermore, most recent reviews have only included Western-based interventions, RCT designs, or a narrow scope of outcome measures and types of TDV. This review addresses this gap by having no restrictions on location and including a broader range of TDV outcome measures.

A particular strength of this review is the inclusion of a detailed assessment of quality; which was absent in previous reviews. Furthermore, across the 20 included studies, the quality assessment indicated that all included research was of a good to excellent standard, and the majority of the research employed a RCT design, which is often considered the ‘gold standard’ research design (Hariton & Locascio, 2018). This increases the ability to infer more reliable and valid conclusions from the research.

The method of determining the different areas of focus of the interventions is a potential limitation of the study, and open to bias and human error. These were extracted by the researcher, and it is possible that it would have been beneficial to include every topic covered (even those unrelated to TDV) to identify any patterns. However, as many of the interventions targeted multiple areas and were part of larger programmes, this was not feasible within the scope of this review. The use of a second-rater was a strength, enabling the reduction of potential bias and human error.

A limitation of this review was the inclusion of only studies published in English, which may have resulted in the omission of relevant studies, and contributed to the overall sample being predominantly from western schools. This both limits the generalisability of the review and the ability to develop a cross-cultural understanding of school-based TDV interventions.

This review was limited by its inability to make statistical inferences about the relationship between factors such as intervention focus, theory, outcome measures and intervention effectiveness. This was not feasible given the time and scope of this review, and the limited number of studies.

Research has highlighted that sexual and gender minority adolescents report greater rates of TDV (Martin-Storey, Pollitt & Baams, 2021). Little data was given in the studies

about the gender and sexual dimension of the research, and often the only information with regard to this was the binary categories of male or female. Therefore, future research should include more information with regards this, to ensure a better understanding of the effectiveness across all genders and sexualities.

Future research

Future research should look to build upon the good quality of research already in this area. In particular, the interventions should be repeated to ensure their reliability at improving TDV outcomes, and thus appropriateness for wider rollout. Additionally, future research should include longer-term follow up periods to help establish the long-term efficacy of the intervention. Future research should also look to extend our understanding of the mechanisms by which change occurs; this could be facilitated through more clear and consistent reporting of the focus of the intervention, the method and fidelity of teaching and the links to the underpinning theory. This could be further supported by a review which conducts statistical analysis to determine the relationship between these variables and effectiveness. Finally, more research needs to be conducted across more cultures to establish the consistency of efficacy across cultures, and where refinements may be necessary. Whilst research is currently of a high standard, future research should ensure that the methods of randomisation and recruitment are appropriately specified in order to establish potential bias. Finally, future reviews should aim to include studies published in across multiple languages to avoid bias.

Conclusion

Despite small effect sizes, given the opportunity to reach a large number of individuals, and the potential positive personal and economic implications of delivering school-based TDV interventions, this review indicates such interventions are beneficial. However, a cautious approach should be taken and further research is needed to establish the reliability and replicability of interventions, and the mechanisms by which they impact TDV, in order to refine and enhance their efficacy.

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Service improvement project

Understanding the psychological needs of parents of whose babies have received care on a Neonatal Care Unit, and exploring the barriers to meeting these

May 2023

Word Count: 5467 (excluding references and appendices, tables as 100 words or less).

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External supervisor: Dr Joanna Mann, Senior Clinical Psychologist, Children's Psychological Medicine, Oxford Children's Hospital, Oxford University Hospitals NHS Foundation Trust.

Proposed journal: The proposed journal for publication is the Journal of Reproductive and Infant Psychology, as it has a particular interest in issues service organisation and psychological work within the field of human reproduction, pregnancy and infancy.

Abstract

Objectives: Parents of infants admitted to a Neonatal Unit (NNU) can experience elevated distress, which can have negative impacts on both parent and baby wellbeing. However parents often report receiving insufficient psychological support. This project aimed to identify strengths and areas of need regarding the provision of parental psychological support in the current NNU service. **Methods:** A benchmarking exercise was conducted, whereby available UK guidelines regarding NNU parental psychological support were identified; these were then rated against current provision. Following this, 33 parents of babies who received care on the NNU completed a self-report online survey. This investigated the accessibility, barriers and effectiveness of the current support, and what psychological support they felt was needed. Survey data were analysed using descriptive statistics and content analysis. **Results:** The benchmarking exercise found strength in the expertise and breadth of the parental psychological support available whilst their babies were on the unit. It identified gaps in support regarding transition to home, peer-support and parent-informed support. It highlighted a need for further staff resource in order to meet guidelines. The parental survey emphasised that those who received support were generally satisfied with this, particularly benefiting from the opportunity to talk with staff. The survey identified a need to increase the awareness of support, opportunities for discussions, and for staff to initiate support. It also identified a barrier of stigma. **Discussion:** Areas of strength and need with regards to parental psychological support are discussed and recommendations are given to guide future service development.

Keywords: parents, psychological support, neonatal unit, benchmarking

Introduction

The evidence base demonstrates that parents of babies admitted to a Neonatal Unit (NNU) experience increased distress, with up to 80% of parents reporting that their mental health suffered during their baby's stay (Griffiths, 2018; Prouhet, Russell & Yaeger, 2018). Furthermore, it has been suggested that only 8% of parents feel that they receive appropriate psychological support (Griffiths, 2018). There are many explanations for parental distress during this period; including, the anxiety of having a child receiving critical care, birth trauma, the shock of having an unwell child, shattered parenting expectations, and having to separate from their baby(ies) due to factors such as employment, caring for other children, or accommodation (Hoffenkamp, Braeken, Hall, Tooten, Vingerhoets & van Bakel, 2015; Ionio, Mascheroni, Colombo, Castoldi & Lista 2019), This distress can have a negative impact on both parent wellbeing and the parent-infant bond. The parental psychological distress of having a baby receive NNU care has also been associated with poorer neuropsychological, behavioural, emotional and social functioning for the baby in infancy and the longer-term (Di Blasio, Camisasca, Miragoli, Ionio & Milani 2017; Forcada-Guex, Borghini, Pierrehumbert, Ansermet & Muller-Nix, 2011; Mascheroni & Ionio, 2019). Therefore, it is essential to understand how best to support parents' psychological needs, both for the wellbeing of the parent and their baby(ies).

Consideration of social and cultural impacts is essential; in the UK non-white individuals, older parents, less educated parents, and those from deprived areas are less likely to be asked about their mental health or receive treatment during the perinatal period, despite being at an increased risk (Redshaw & Henderson, 2016). Multiple reasons have been suggested for such disparities in perinatal mental health support, including discrimination, communication difficulties, increased stigma in certain cultures and a lack trust in

professionals (Patel & Hanif, 2022; Smith, Lawrence, Sadler & Easter, 2019; Slaughter-Acey, Caldwell & Misra, 2013).

Kazak (2006) illustrated a need for a preventative approach and developed the Paediatric Psychosocial Preventative Health Model (PPPHM). PPPHM illustrates how families, or carers of acutely or chronically unwell children, might be provided psychosocial support. The premise is that everyone should be provided with low-intensity support (the bottom tiers), and that this can reduce the requirement for more intensive support in the future (the upper tiers). It suggests that everyone can benefit from psychoeducation, a smaller proportion from more tailored treatment and the smallest proportion will require specialist psychological support.

The Care Quality Commission (CQC) (2017) advises optimal neonatal care should include a focus on parental psychological wellbeing, with staff responding to parents in a timely and compassionate manner. They emphasise that to achieve this there is a need for the involvement of parents in the design of neonatal services, facilitated through feedback. This is aligned with the National Health Service (NHS) (2019) Neonatal Critical Care Transformation Review, which suggested services should develop and invest in support for parents. It recommended that NNUs review information regarding parental psychological support and access to support, and address gaps in provision. The NHS Long Term Plan (2019) advises this should be implemented by 2024.

Ellis (2006) recommended that parental expectations are considered alongside benchmarking exercises. Benchmarking has been found to be beneficial in the NHS, as it provides a structured approach to enable current service practice to be compared against recommendations for best practice (Ettorchi-Tardy, Levif & Michel, 2012; Royal College of Nursing (RCN), 2014). This can enable the identification of areas of strength and need, and facilitate the development of action plans. This is proposed to lead to accelerated quality

improvement, enhanced professional development, and improved patient care (Department of Health UK, 2007; RCN, 2014).

Service context

This project took place within an NHS tertiary centre for neonatal care containing three units: Intensive Care Unit (ICU), High-Dependency Unit (HDU) and Low-Dependency Unit (LDU) with 53 cots and approximately 750 admissions per year. Within the neonatal psychology team, there are three part-time Clinical Psychologists and one part-time Assistant Psychologist, and an overall staff team of around 200. There are around 15-30 parent referrals per month, from ward staff (approximately 75%) and self-referral (approximately 25%); prominently for acute distress and trauma.

Aims and outcomes

This project will seek to gain a better understanding of parental experiences of the psychological support available on the NNU (across ICU, HDU and LDU), and establish to what extent current service provision is felt to meet parental psychological needs. It is hoped that by comparing the current provision with the competencies set out in relevant guidelines, this will accelerate service improvement and identify strengths and gaps in provision. Overall, it is hoped that this will generate service recommendations that facilitate more accessible, helpful, parent-informed psychological care that meets the competencies set out by guidelines.

Methods

Phase 1: Benchmarking

Available guidelines were identified online, with input from a neonatal psychologist working at a regional network level. Guidelines which referenced parental psychological support within a NNU context were extracted. Any guidelines regarding psychology staffing levels were also included, as this is crucial in providing any recommended support.

Guidelines were required to be UK based, and within the past 10 years to ensure relevance (RCN, 2014).

These guidelines were then assessed as to whether they were fully met, partially met, or not met. This was completed by the current author and a service psychologist. To ensure reliability, a second service psychologist subsequently rated the guidelines. Results were compared until agreement on all items was reached.

Phase 2: Parental survey

Participants

A survey which aimed to better understand parental experiences of psychological support on the NNU was developed through discussion with the services' psychologists, and parents with lived experience of having a baby on the current NNU. This included tick-box and open text questions related to the support received, desired support, awareness of support, and helpfulness of support (please Appendix 2.B for full survey). It was also reviewed by parents with lived experience, who stated it felt useful and appropriate to complete.

Whilst their baby(ies) were on the NNU, parents were approached by staff and asked if they were interested in being contacted about service evaluations, and given a consent form to complete. Upon their baby(ies) discharge, those who had completed the consent form and met the eligibility criteria, were contacted via email and given a link to the survey. A link to take part in the survey was also posted on the Support for the Sick Newborn and their Parent (SSNAP) Facebook group for parents who had a baby(ies) stay in the current service.

Individuals were eligible to take part if they were: aged over 18, their baby(ies) was on the NNU for a minimum of three days within the past six months, they were able to read/ write English and had capacity to provide consent. These criteria were selected to ensure sufficient time on the NNU to be able to reflect on experiences, and within a recent timeframe for relevance (Morse, 1991).

A total of 33 parents completed the survey. Parents ranged from aged 24-42 years (M = 32.8) in age. Table 1 and Table 2 provide further information regarding parent demographics, and their baby(ies) stay on the NNU.

Whilst there is no commonly accepted sample size for qualitative studies using content analysis, saturation of data may indicate the optimal sample size and ensure appropriate data categorisation and abstraction (Elo, Kääriäinen, Kanste, Pölkki, Utriainen & Kyngäs, 2014; Guthrie, Petty, Yongvanich & Ricceri, 2004). Therefore, the data were checked and briefly analysed regularly to allow for the identification of data saturation (Guthrie et al., 2004). Data saturation was reached at 33 participants; following this, recruitment was terminated.

Table 1

Parent demographic information.

Variable	Frequency	Percentage (%)
Gender (33 responses)		
Female	29	89
Male	4	11
Non-binary	0	0
Prefer not to say	0	0
Other	0	0
Ethnicity (33 responses)		
White	30	91
Mixed/Multiple ethnic groups	0	0
Asian/Asian British	2	6
Black/African/Caribbean/Black British	0	0

Arab	0	0
Other ethnic group	1	3
Prefer not to say	0	0
Sexuality[1] (25 responses)		
Heterosexual/Straight	24	96
Lesbian	1	4
Relationship Status (33 responses)		
Single	1	3
In a relationship	14	42
Married	18	55
Separated	0	0
Divorced	0	0
Widowed	0	0
Other	0	0
Prefer not to say	0	0
Employment Status (33 responses)		
Employed full time	8	24
Employed part time	5	15
Self-employed	2	6
Student	0	0
Not employed	2	6
Maternity/Paternity Leave	15	46
Retired	0	0
Other	1	3
Prefer not to say	0	0

Note. [1] = Participants responded using a free text box, the responses given have been

grouped into categories.

Table 2

Information regarding the number of babies the parent had receiving care on the NNU, the time since baby(ies) discharge, and the length of baby(ies) stay.

Variable	Frequency	Percentage (%)
Number of baby(ies) on NNU (33 responses)		
1 baby	30	90
More than 1 baby	3	10
Time since baby(ies) discharge (29 responses)		
0 - < 4 weeks	7	24
4 - < 8 weeks	7	24
8 - < 12 weeks	6	21
12 - < 16 weeks	4	14
16 - < 20 weeks	1	1
20 - < 24 weeks	3	3
24 - < 26 weeks	1	1

Length of baby(ies) stay (33 responses)		
0 - < 4 weeks	16	48
4 - < 8 weeks	5	15
8 - < 12 weeks	9	27
12 - < 16 weeks	2	6
16 - < 20 weeks	1	3
Unit/s baby(ies) stayed on (33 responses)		
NICU	24	74
HDU	27	82
LDU	19	58

Note. NNU = neonatal unit. NICU = neonatal intensive care unit. HDU = high dependency unit. LDU = low dependency unit.

Measures

A survey with a combination of tick-box and free-text answers was developed in consultation with the service psychologists and an academic supervisor with expertise in this field. The project aims and survey were reviewed by two parents with lived experience. Their feedback, particularly regarding the sensitive wording of certain questions, was incorporated into the survey. Following this, the survey was given to the hospital patient experience team and media and communications team; both approved survey distribution.

The survey included: an information sheet, consent from, demographic questions, questions regarding their experience of psychological support on the NNU and debrief information (see Appendix 2.B). The average completion time was 95 minutes, however participants could stop and return at any point and so it is possible that this is an overestimate.

Online surveys were chosen due to their convenience and the ability to stop and return. This is useful for parents with young children, and when talking about sensitive topics. Unlike interviews, this enabled anonymity, which can facilitate parents to feel more comfortable to share their opinions (Braun and Clarke, 2013; Dillman, Smyth & Christian, 2014).

Procedure

1. Upon opening the survey link, participants were presented with the participant information sheet.
2. Participants were presented with a consent form, for which they selected tick-boxes to confirm they meet the eligibility criteria and consented to proceed (they could only proceed if all eligibility criteria were selected).
3. Participants completed the survey questions.
4. Following the survey, debrief information was provided.

Data Analysis

For the survey questions requiring 'tick-box' answers, these were exported into Microsoft Excel and analysed to produce graphs and descriptive statistics.

Krippendorff's (2018) method of content analysis was used to guide the analysis of the written survey responses. Content analysis was chosen as it allows for replicable and valid inferences from texts, especially useful for survey questions (Krippendorff, 2004; Lavrakas, 2008). The analysis took a manifest approach, as it sought to summarise what the participants said (Berg, 2001; Kleinheksel, Rockich-Winston, Tawfik & Wyatt, 2020).

Firstly, the content analysis involved the researcher familiarising themselves with the data by reading it multiple times. A ground-up inductive approach was taken, in which codes were derived from the data. The coding process was performed repeatedly to refine the codes. The frequency of each code was collated.

A positivist epistemology was taken, assuming that the 'truth' within the texts was objective, however it is acknowledged that the researcher's experience cannot be fully separated from the process, and can unintentionally lead to bias (Kleinheksel et al., 2020). Therefore, to enhance reliability, a second researcher performed the analysis separately (Graneheim & Lundman, 2004). Cohen's Kappa (Cohen, 1960) indicated strong inter-rater reliability (κ=.91), with almost perfect agreement (McHugh, 2012).

Data management

Data management adhered to the hospital policy. Data was password-protected, stored on the researcher's hospital OneDrive and restricted to the study research team. In line with policy, data will be held for five years from completion, and if at the end of this retention period the data is no longer needed, it will be destroyed.

Ethics

Given the sensitive nature of this topic, there was potential for triggering distress from thinking about the time their baby(ies) were on the NNU. Signposting was provided on the information and debrief sheet. Except for consent and eligibility criteria, no other question was compulsory, and following consent, participants could move within the survey to receive signposting information, regardless of whether they had completed the survey questions.

Surveys did not request names or emails, and could be completed anonymously. Any personal details disclosed in the responses which could identify participants are omitted from reports.

The service evaluation was approved by the hospital's Psychological Medicine Governance team and registered on their internal service evaluation register. It was also reviewed by the hospital's Research and Development Department who confirmed this met the criteria for service evaluation, and not research.

Results

Phase 1: Benchmarking

Three sets of guidelines were identified:

1. Neonatal Families and Staff Together (NFaST) (2021) evaluation report
2. CQC (2017) Inspection framework for NHS specialist children's hospitals
3. The British Psychological Society's (BPS) (2016) briefing paper on guidance for Perinatal Service Provision

Eligible guidelines were extracted and rated against current service provision; results are displayed in Table 3.

This highlighted that a strength of the service provision was the breadth of skilled support provided; from support with bonding through to treatment decisions. However, a limitation was the lack of dedicated staff time to enable access to, and deliver this support. The need for the development of NNU peer support was identified, along with the involvement of parent-veterans in support groups and service development.

All guidelines related to psychological support with transitioning home, were only partially met. Predominantly, this was not due to skill, but to limited staff resource.

Finally staffing level recommendations were more challenging to benchmark, as guidelines were not specific to a service providing solely neonatal care (without maternity care). In line with NFaST recommendations, there was a clinical psychologist offering support. However the BPS recommends (across neonatal and maternity) further support from a band 8C and 8A clinical psychologist, than is currently provided in this service.

Table 3

A table showing the extracted guidelines, and whether these were met by the service.

Guideline	From	Met	Comments
<u>Parental Support whilst baby on NNU</u>			
On-going support from admission.	BPS	Yes	
Direct/indirect support through	BPS	Yes	Training provided in medical

training and support for medical and nursing staff.			induction and on nurse study days.
Clinical psychologist to provide support on bonding, attachment, adjustment to bad news, difficult treatment decisions, bereavement, and advice in relation to other children in the family. Including lead profession for this.	BPS, CQC	Yes	
Physical space and ringfenced time for parents to come together.	NFaST	Partially	Three family rooms. Currently no ringfenced time, but in the process of setting up an inpatient group with ringfenced time.
Safe, effective veteran led peer support in the unit.	NFaST	No	The following due to begin: -Inpatient parent group involving veteran parents. -SSNAP veteran parent volunteers (were previously present prior to Covid-19 and due to be re-starting)
Staff champions who are given time and resources to develop and embed peer support and emotional wellbeing initiatives.	NFaST	No	There is a staff wellbeing working group, but very limited allocated time for this currently due to staff shortages

Clear pathways and access to specialist mental health support, with dedicated unit time.	NFaST	Partially	Clear pathways and access, but limited availability.
On-unit counselling/therapy offer for parents, supported by band 6/7 counsellor. senior PWP/psychotherapist to offer therapeutic support.	NFaST	Yes	
Developing parent involvement into service development.	NFaST	Partially	Psychology team developing this with inpatient group. Currently conducting service development projects with parent involvement.
<u>Transition to home support</u>			
Support the transition from hospital to home (e.g. caring for a baby at home, particularly if ongoing medical needs/disabilities)	BPS	Partially	Yes, but have to prioritise referrals - do not have capacity to provide to every family.
Prepare families for the discharge process and how this might feel.	NFaST	Partially	A broader approach is being taken by staff to embed this into the unit.
Work closely with primary care teams.	NFaST	Partially	Links made with health visitors, but not close working.
Counsellor/therapist is able to offer	NFaST	Partially	Yes, but have to prioritise

follow up in the community.			referrals as not capacity to provide to every family. Limit of two sessions.
Develop links and pathways into local services/charities to signpost families to additional therapeutic support pre/post discharge. Supported by dedicated time for named staff members to promote.	NFaST	Partially	Signposting/onward referrals document has been developed and onward referrals are made, but staff members outside the psychology team do not have allocated time.
<u>Staffing level recommendations</u>			
Embedded clinical psychologist on the unit to offer support to infants, parents and staff and embed psychological wellbeing across the system. Supported by a band 8a clinical psychologist.	NFaST	Yes	
Recommendations for a hospital-based service, with a birth population of approximately 10,000, providing both maternity and neonatal psychology care as follows: -0.6 WTE band 8c clinical	BPS	Partially	Current service provision is a: 0.5 WTE Band 7 clinical psychologist 0.6 WTE Band 8a clinical psychologist 0.3 WTE Band 8b clinical psychologist

psychologist -2.5 WTE band 8a clinical psychologist	0.6 WTE band 5 assistant psychologist However is it noted this is only provided in neonates – not maternity.

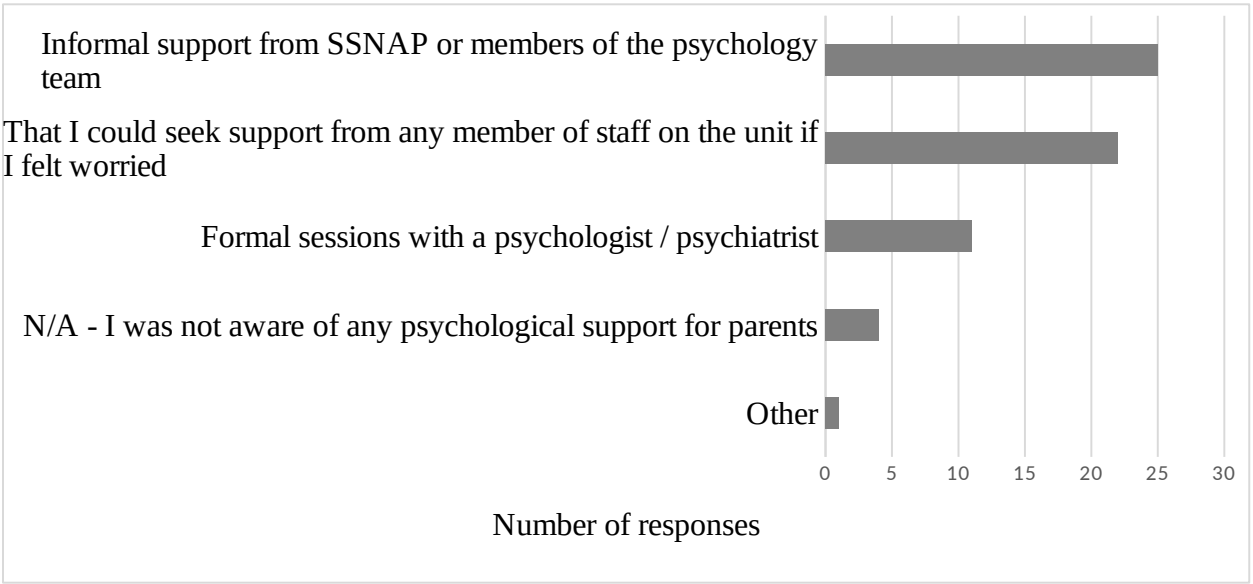
Note. BPS = guideline extracted from The British Psychological Society's (BPS) (2016) briefing paper on guidance for Perinatal Service Provision. NFaST = guideline extracted from the Neonatal Families and Staff Together (NFaST) (2021) evaluation report. CQC = guideline extracted from the Care Quality Commission (2017) inspection framework for National Health Service specialist children's hospitals. WTE = whole time equivalent.

Phase 2: Parental survey

Figures 1-4 show the responses to the 'tick-box' survey questions. The results displayed in Figure 1 show that the support parents were most aware of was informal support provided by SSNAP or the psychology team. 12% of parents were not aware of any psychological support.

Figure 1

Responses to the question 'What psychological support for parents, if any, were you aware of during your baby's (or babies') time on the neonatal unit?' (33 respondents).



The responses to how parents found out about support are displayed in Figure 3, and show that of the support parents were aware of, the majority found out about this from SSNAP support workers, nurses and the psychology team. No one reported finding out about support via the Chaplaincy volunteer, nor did any respondent report meeting with the Chaplaincy volunteer.

Figure 2

Responses to the question 'If you were aware of this parental psychological support how did you find out about it?' (31 respondents).

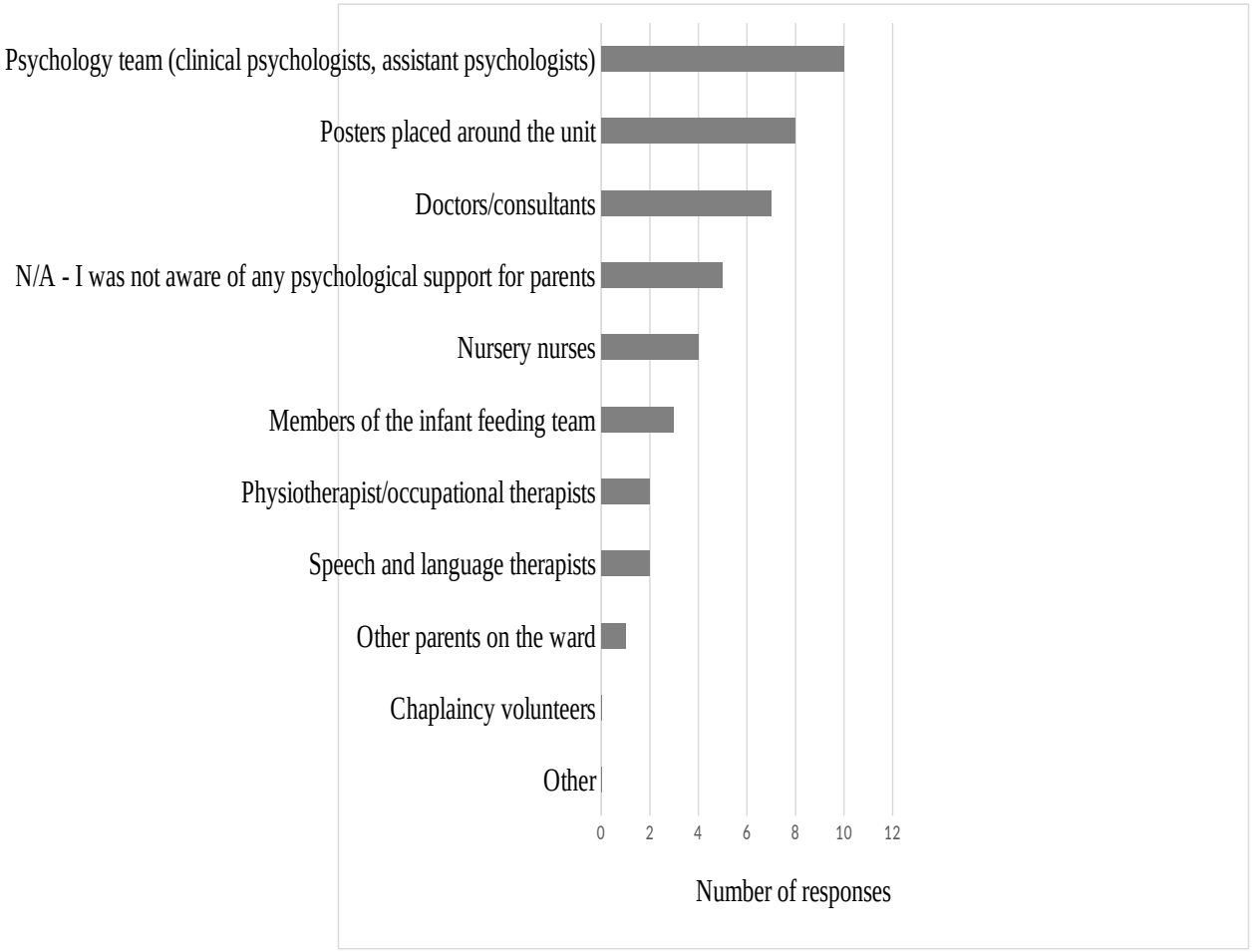


Figure 3 refers to the psychology support received, with parents predominantly receiving informal support in the form of discussions with staff members. Formal psychology sessions were the least frequent form of support received. 25% of respondents reported receiving no psychological support.

Figure 3

Responses to the question 'What, if any, support did you receive for your psychological needs?' (32 respondents).

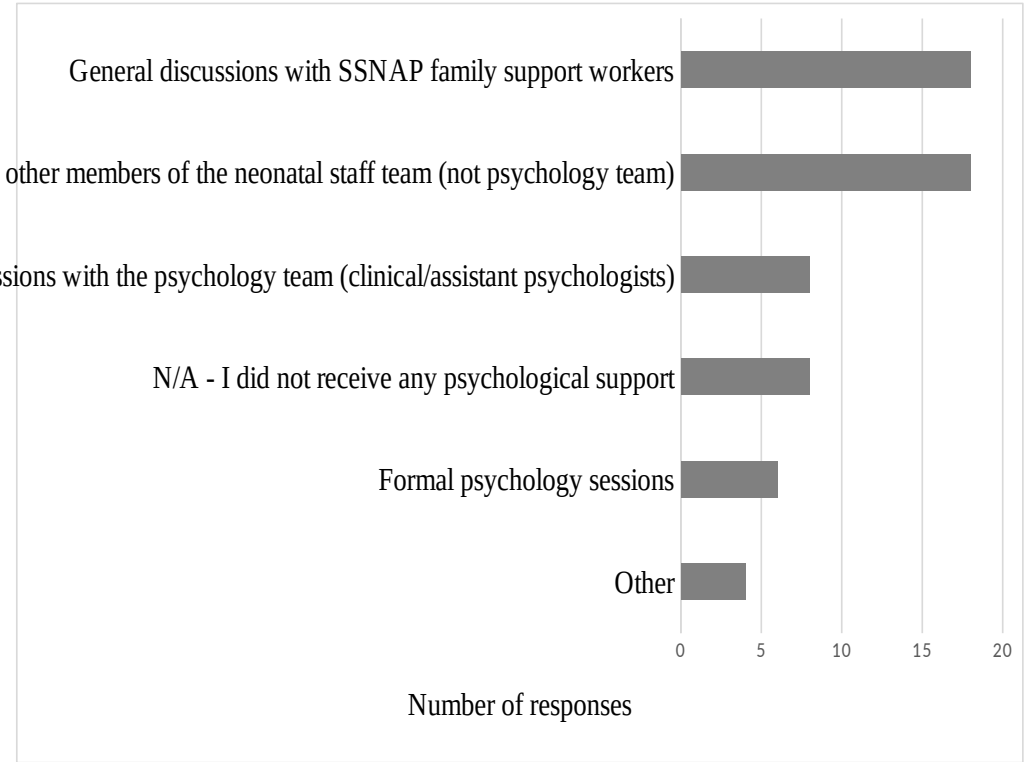
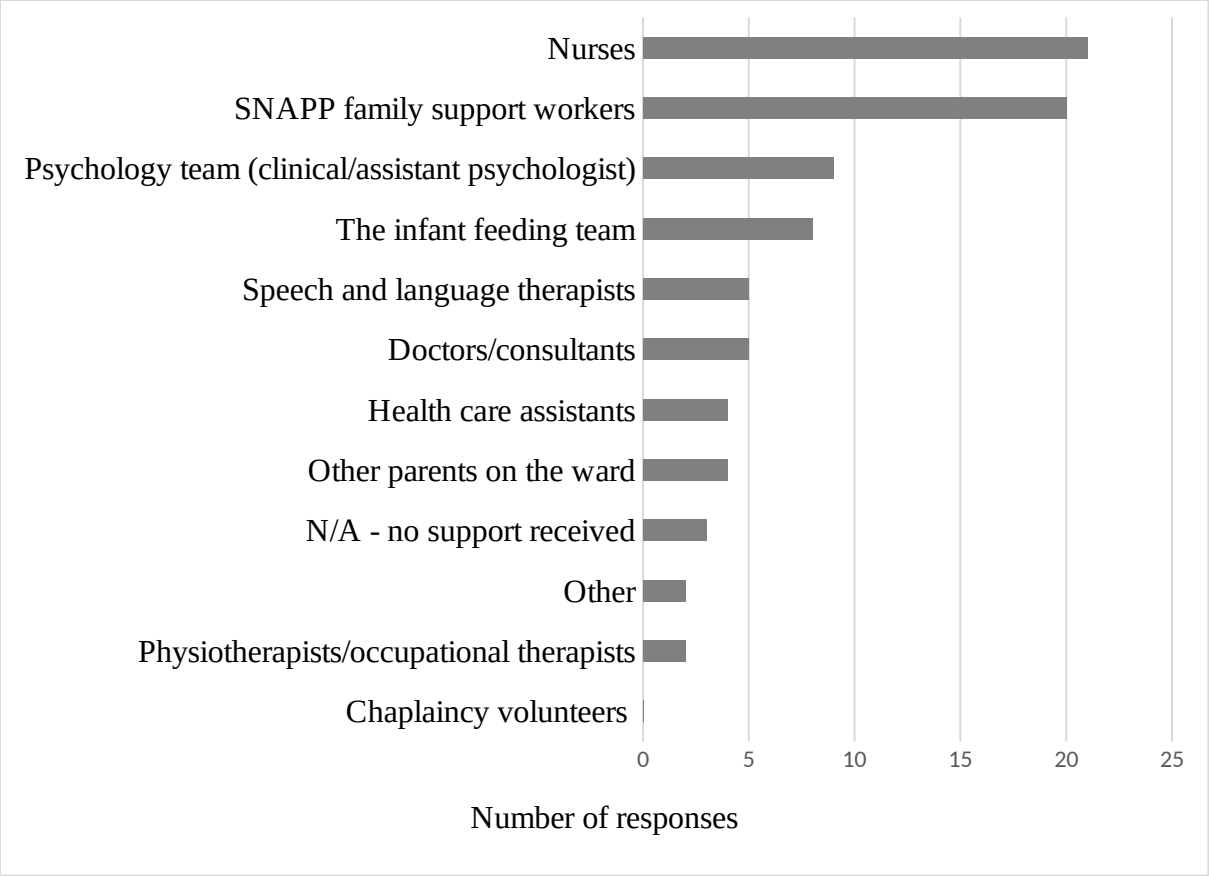


Figure 4 refers to whom parents received psychological support from, with the largest proportion of support being received from nurses (75%) and SSNAP family support workers (71%). 32% received support from the psychology team.

Figure 4

Responses to the question 'Who did you receive this (psychological) support from?' (28 respondents).



The results of the content analysis, which was used to analyse the free-text questions are displayed in Tables 3-12 below.

Ease of access to support

Table 4 refers to how parents perceived the ease of finding out about support. This question identified the need for more awareness of available support. Furthermore, throughout the survey, in 70% of free-text questions, codes related to requiring more information or knowledge of the support available were present. Respondents suggested they would like to be given information about support through material information in the form of leaflets, posters and websites. There were also three requests to be verbally told about support. In question one, one person mentioned wanting to receive support information in a timely manner, ideally upon arrival, and this was a code that was echoed in 40% of questions throughout the survey.

Table 4

Codes and frequency counts for the question 'Is there anything that would have made it easier to find out about the support available for parents?' (22 responses).

Codes	Satisfactory	Material Information	Verbal Information	Staff Initiation	Timely
Frequency	6	7	3	3	1

Perceived helpfulness of support

Tables 5 and 6 focused on the support parents found most helpful. Helpful support was most commonly reported to be received from the nurses, SSNAP and psychology team. As shown in Table 5, most frequently, respondents stated finding talking with staff particularly helpful, whether this was formally or informally. For example, *'just having a friendly face to talk to was really helpful and helped keep me sane during a stressful time'*. Parents also reported finding it helpful to receive one-to-one support, and that it was beneficial when the support was regular. Other helpful aspects reported included support dealing with the transition to home, including practical support with planning this. Finally, with regards to helpful support received, three parents reported finding it beneficial to their own wellbeing to be kept informed on their babies welfare. For example, *'being kept informed at every step of my son's treatment'*.

Table 7 refers to the support that parents found unhelpful. 52% of respondents indicated this question was not relevant to them. 37% of responses indicated that that they were happy with the support received and/or there was nothing unhelpful about it. There were only four comments that mentioned finding support unhelpful. These were not seeing psychology staff on the ward, feeling as though they were not involved or listened to in choices regarding their baby's(ies') care, staff not initiating support and that the ward was not

an appropriately private place to receive support. Throughout the survey, reference to a desire for, and a lack of, staff initiating support was present in 60% of questions, and codes related to privacy were present in 40%.

Table 5

Codes and frequency count for the question: 'What type of support, and from who, did you find most helpful overall? (Please write N/A if you did not receive any psychological support)' (32 respondents).

Codes	Visibility	Staff Initiation	Parent Availability	Knowledge	Uncertain	Satisfactory	N/A
Frequency	2	3	2	8	3	2	9

Table 6

Codes and frequency count for the question : 'What aspects of the support you received did you find most helpful? (Please write N/A if you did not receive any psychological support)' (31 respondents).

Codes	Talking	Transitions	Individual	Regularity	Updates	N/A
Frequency	10	2	2	3	3	10

Table 7

Codes and frequency count for the question: 'What aspects of the support you received did

you find unhelpful? (Please write N/A if you did not receive any psychological support)' (27 respondents).

Codes	Satisfactory	Invisibility	Lack of Privacy	No Staff Initiation	Disempowerment	N/A
Frequency	9	1	1	1	1	14

Desired support

Table 8 refers to the support parents would have liked to receive. The most common response was that the support they received was sufficient. However, in line with responses for other questions, parents highlighted the need for knowledge about available support, and receiving this from admission.

Parents commented that it would be valuable to have more opportunities to speak about their experiences. It was noted that sometimes they were talked to in scientific language, and that staff simply explaining both what it meant to be on the NNU and the condition of their baby would have helped put them at ease.

The opportunity to receive support in private was again mentioned throughout the survey, with regard to a lack of privacy being unhelpful (Table 7), a desire for more privacy (Table 8) and that informal support would have been easier to access if there was more privacy (Table 11).

Two respondents stated that they would not like to receive any support, but did not elaborate on why.

Table 8

Codes and frequency count for the question: 'What sort of support would you have liked to receive as parents (either instead of or as well as any support you did receive)?' (25 respondents).

Codes	Timely	Privacy	Knowledge	Talking	Peer Support	Understanding	Satisfactory	None
Frequency	2	3	3	2	1	3	4	2

Barriers to accessing support

Tables 9-12 focused on the barriers to accessing support, and how support could be better facilitated.

When considering the barriers to accessing support, again, the lack of knowledge of this support was most commonly given both as the biggest barrier, and (increased knowledge) as the thing that would have made it easier to access support.

Similarly, a lack of staff visibility was noted as a barrier, and increased visibility was reported to potentially increase access to support.

Parents reported that having ways to approach staff themselves, such as drop-in times or contact numbers, may better enable access to support. However, it was also commented by parents that they often are time-limited themselves and often do not want to spend time separated from their baby(ies), with one person commenting '*fear of the support resulting in them having to spend less time with their baby/babies on those days'*.

A number of parents noted feeling as though there were resource constraints, demonstrated by staff not appearing to have time to provide support and looking busy.

The stigma of receiving or needing support was also recognised as a barrier, in particular with the connotation that receiving support was being seen as 'not coping'.

A number of parents commented that when you are struggling with your mental wellbeing this can be overwhelming, and can make it difficult to ask for help. Parents

frequently commented that staff directly approaching and identifying parents in need may increase support accessibility.

There were a number of comments expressing satisfaction in the accessibility of support, most of these were related to accessing informal support and general discussions. For accessing both support in the form of general discussions and formal support, a number of parents stated that they did not know what would have made it easier to access this support.

Table 9

Codes and frequency count for the question: 'What do you feel are the barriers to parents accessing psychological support on the neonatal unit from your experience?' (25 respondents).

Codes	Privacy	Invisibility	Stigma	Knowledge	Separation	Mental Wellbeing	Resource Constraints	No Barriers
Frequency	2	2	3	6	3	3	3	2

Table 10

Codes and frequency count for the question: 'What would have made it easier to access support in the form of more general discussions with the wider team?' (21 respondents).

Codes	Visibility	Staff Initiation	Knowledge	Uncertain	Satisfactory
Frequency	2	3	6	3	5

Table 11

Codes and frequency count for the question: 'What would have made it easier to access

informal support from the psychology team or SSNAP, or the chaplains?' (23 respondents).

Codes	Visibility	Staff Initiation	Privacy	Parent Initiation	Knowledge	Satisfactory
Frequency	2	2	1	3	8	6

Table 12

Codes and frequency count for the question: 'What would have made it easier to access formal psychological sessions?' (24 respondents).

Codes	Visibility	Staff Initiation	Parent Availability	Knowledge	Uncertain	Satisfactory
Frequency	2	3	2	8	3	2

Other comments

In the final question, parents again mentioned wanting staff to more actively initiate support, the stigma of receiving support, information being provided on admission, and receiving regular support. One person mentioned that parent groups may be beneficial.

Table 13

Codes and frequency count for the question: 'Do you have any other comments or suggestions

for improving the psychological support for parents on the neonatal unit?' (19 respondents).

Codes	Staff Initiation	Peer Support	Satisfactory	Stigma	Timely	Regularity	Nothing
Frequency	3	1	4	2	2	4	4

Discussion

The aim of this service improvement project was firstly to use benchmarking to identify strengths and gaps in provision with regard to the competencies set out by guidelines. The second was to use a survey to gain a better understanding of parents perceptions of the parental psychological support provided on the NNU; in particular, the barriers to support, awareness of the support and the helpfulness of support. Together, findings are combined to inform service provision by providing a set of recommendations to enable more accessible, helpful, parent-informed psychological care. This is in line with the NHS (2019) Long Term Plan, and the Neonatal Critical Care Transformation Review (NHS, 2019).

A strength identified was that those who did receive psychological support were satisfied with this. Therefore, the focus should be on increasing the availability, access to, and knowledge of this support.

The benchmarking and the parental survey highlighted congruent perspectives. Firstly, parents themselves noted the lack of staff resources and visibility of staff, and benchmarking identified the need for more staff resource in the NNU in order to meet guidelines. Furthermore, the benchmarking identified gaps in provision across all areas of supporting parents' transition to home; the predominant reason for this being a lack of staff resource. The parental survey also highlighted the potential benefit of transitional support,

further emphasising the need to address this gap. These results suggest that staff resource must be increased to meet the required support.

The parental survey identified the need to provide parents with more knowledge and information on the psychological support available; be this verbally by staff or via information packs. The parental survey found that a number of parents wished for staff to initiate the support. However, it is unclear whether staff are aware of this, and with 75% of referrals coming from staff it is possible that this is happening some of the time, but it is unclear at present who may be being missed. Therefore input from staff, to better understand their perceptions on approaching and identifying parents, would be beneficial to better tailor recommendations. The request by parents for increased awareness and knowledge of support is aligned by the benchmarking exercise, which highlighted the need for protected time for staff to help parents access support.

With regards to the support that parents found helpful and reported wanting to receive, most commonly reported was the opportunity to talk with staff. However, staff input is needed in order to understand if they are aware of this, and whether they feel able to do this. A broad range of staff were reported to have been helpful to parents, echoing Kazak's (2006) PPPHM that less specialist support can be facilitated by all staff members. However, ensuring staff feel competent to do this and have appropriate supervision is essential (Snowdon, Leggat & Taylor, 2017). Formal psychological support was received by fewer people, and thus it is possible that this explains why there were less comments of satisfaction, specifically with regard to this support. More general support from staff in the form of discussions, and fewer people accessing formal support, would be congruent with Kazak's (2006) PPPHM.

There was mention in both the benchmarking and parental survey of the gap in provision of peer support.

Finally, the benchmarking emphasised the need for involvement of parents in planning service provision; it is hoped that this project will help contribute to this.

Limitations

The results of this survey are restricted by the lack of specific NNU guidelines available to benchmark against. Therefore, it would be beneficial for future research to establish a larger number of more tailored guidelines, as it is anticipated this would enable more tailored service recommendations.

The majority of the sample was female, heterosexual, in a relationship, and of white ethnicity and therefore results may be limited in their generalisability. Future research could look to conduct this survey in a more diverse demographic group. This is particularly important, as previous research has found that those of minority groups experience additional barriers to support (Patel & Hanif, 2022; Smith, Lawrence, Sadler & Easter, 2019), and it is hoped that a more diverse sample might help to better identify and understand if these barriers exist in the current service, and how to overcome them. It has also been found that mothers and fathers may experience different types of distress in the perinatal period (Mahmoodi, Golboni, Nadrian, Zareipour, Shirzadi & Gheshlagh,2017), therefore it is anticipated that the inclusion of more fathers would enable the identification of any differences in the perception of support received and/or desired between mothers and fathers.

There were fewer responses to later survey questions. The reason for this is unclear, it may have been due to the length of the survey resulting in fatigue, or that respondents had already responded with everything they wanted to say.

Whilst surveys were convenient to this sample, it is possible that the addition of interviews may have enabled richer data (Bauer & Gaskell, 2000) and future research may include supplementary interviews.

A limitation is the inclusion of solely parental perspectives, in order to better tailor service provision it is essential to gain the perspectives of staff who are providing this

support. Therefore, it is recommend that these findings are disseminated with staff and their perceptions gained. This is particularly important, as given the findings of this survey indicate that a barrier to psychologists providing the recommended support is a lack of time, therefore it hypothesised that this may also emerge as a barrier across other professionals within the NNU. A lay summary can be found in Appendix 2.A for dissemination purposes with NNU staff.

Recommendations

The above findings were discussed with the service's clinical psychologists. The findings have also been shared via team meetings, a service away day and a hospital conference with NNU staff. Informal verbal feedback has suggested that whilst staff would like to provide the recommended support, they are limited in their ability to do this due to resource constraints. The researcher has been informed that peer support groups and resource packs are in the process of being created. Prior to implementing the other recommendations, a formal evaluation of staff perspectives on the below recommendations, is anticipated to be undertaken.

The recommendations made from the current project were as follows:

1. The findings and recommendations of this report should be shared with service staff and their capacity, motivation, ability and how comfortable they feel to provide recommended support established.
2. For any gaps in knowledge or ability, appropriate training should be provided.
3. Where there is insufficient staff resource, staff provision should be increased.
4. Develop information packs outlining available psychological support. These should be shared with parents upon their baby(ies) admission, and placed on the wards. Within these, normalise the need for support, and that support can be received in privacy.

5. NNU staff should be aware of available support, and where appropriate, share this verbally.
6. Increased presence of psychology staff on the wards, be this through walk-rounds or protected time on the ward.
7. Develop a protocol for staff on how and when to approach and offer support. Ensure any staff providing support have appropriate supervision for this.
8. Provide designated times and methods that parents can contact Psychology or SSNAP staff for support, e.g. ‘drop-in’s’ or contact information.
9. If providing support in private, to be aware that it may be difficult for the parent to be separated from their baby(ies); make adjustments for this if necessary.
10. Provide support for the transition from hospital to home, and an increase of follow up in the community where appropriate. Facilitated through protected time for this and/or increasing staff resource.
11. Develop parental support groups, and peer-to-peer support opportunities.
12. Develop links with local services to be able to appropriately refer and signpost to these. Ringfenced time should be given to staff members to enable this.

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Theory-driven research project

Does the Cognitive-Model predict PTSD symptom severity, and how is this related to shame, in youth who have experienced Intimate Partner Violence?

May 2023

Word Count: 5497 (excluding references and appendices, tables as 100 words or less).

Internal supervisor: Dr Myra Cooper, Senior Research Tutor, The Oxford Institute of Clinical Psychology Training and Research.

External supervisor: Dr Carmen Chan, Clinical Psychologist and Service Lead, Oxford Horizon Supporting Youth and Families Affected by Sexual Harm, Oxford Health NHS Foundation Trust.

Proposed journal: The proposed journal for publication is the journal of Behaviour Research and Therapy. This is as it has a particular interest in cognitive-behavioural methods to treat psychopathology. It was the journal in which the trauma-focused Cognitive-Model used in this study, was originally published. .

Abstract

Background: Intimate Partner Violence (IPV) is prevalent in youth, and can lead to Post-Traumatic Stress Disorder (PTSD). Ehlers and Clark's (2000) Cognitive-Model, which proposes negative appraisals, disjointed memories and unhelpful coping strategies maintain PTSD, commonly informs PTSD treatment. Shame is linked to PTSD symptoms, and the

Cognitive-Model. **Objectives** i) To assess if the Cognitive-Model predicts PTSD symptoms in Youth IPV (Y-IPV) survivors. ii) To examine if trauma-related shame predicts PTSD symptoms. iii) To assess if trauma-related shame moderates the relationship between the Cognitive-Model variables and future PTSD symptoms. **Method:** 85 Y-IPV survivors aged 18-25 completed questionnaires measuring the Cognitive-Model variables, trauma-related shame and possible covariates, approximately six months apart. **Results:** Safety behaviours, responses to intrusions and negative appraisals predicted PTSD symptoms; however, when controlling for covariates, only safety behaviours predicted future PTSD symptoms. Trauma-related shame predicted PTSD symptoms; however, when controlling for covariates, it no longer predicted future PTSD symptoms. Trauma-related shame did not moderate the relationship between the Cognitive-Model variables and future PTSD symptoms, when controlling for covariates. **Discussion:** The results provide partial support for the Cognitive-Model, and its prediction of PTSD symptoms, indicating safety behaviours as a unique predictor in Y-IPV survivors. Implications, limitations and future research are discussed.

Keywords: IPV, PTSD, Cognitive-Model, Youth, Shame

Introduction

Intimate Partner Violence (IPV) in youth

IPV negatively affects youth worldwide, across economic, religious, and cultural groups (World Health Organisation (WHO), 2012). IPV is defined by the WHO (2021) as behaviour by a romantic partner that causes physical, sexual or psychological harm, including

acts of physical aggression, sexual coercion, psychological abuse and controlling behaviours. IPV is associated with negative physical, emotional, social and economic impacts (Sanz-Barbero, Barón & Vives-Cases, 2019; WHO, 2012), with the WHO (2013) identifying IPV as a major target for prevention and intervention.

'Youth' is defined by the WHO (2021) and the United Nations (2013) as individuals aged 15-24. It is reported that 71% of women experience IPV before age 25 (Breiding, 2014). The Crime Survey for England and Wales (Office of National Statistics, 2019) reported individuals aged 16-24 are most likely to experience domestic abuse. Research has largely focused on women IPV survivors; however, men represent up to 15% of IPV survivors, and it is suggested that this could be an underestimate due to under-reporting (Huecker, King, Jordan & Smock, 2021).

Transition to adulthood is a vulnerable developmental period, and experiences of romantic relationships at this time provide a foundation for future relationships, self-concepts and self-esteem (Penado Abilleira & Rodicio-García, 2017; Sáez et al., 2021; Stöckl, March, Pallitto & Garcia-Moreno, 2014). Furthermore, brain development is proposed to continue until approximately age 25 (Berman et al., 2009), and can be negatively impacted by trauma and psychological stress (Arain et al., 2013). Therefore, youth represents a crucial period where individuals are not only at an increased risk of IPV, but also there is an increased vulnerability to its long-term detrimental consequences. Despite this, youth IPV (Y-IPV) has received less attention compared to adult IPV more generally.

Feminist and attachment theory can be used to understand Y-IPV (Bonache, Gonzalez-Mendez & Krahé, 2017; Lawson, 2012; Tussey, Tyler & Simons, 2021). Feminist theory proposes that IPV perpetrated by men against women can be understood as resulting from a society where men are, and have expectations to be, in positions of power. This is suggested to lead to male perpetrated IPV as a way of expressing power and control over

women (Becker, Kafonek & Manzer, 2021; Dobash & Dobash). However, this does not fully explain the experience of IPV perpetrated by women against men, same sex relationships, or those of other gender identities (Cannon, Lauve-Moon & Buttell, 2015; Holtzworth-Munroe; 2005). Attachment theory proposes that as an infant one requires a caregiver to provide a safe environment which is responsive to their physical and emotional needs; when this is consistently provided, a secure attachment style is developed, and in the absence of this, an insecure attachment (Ainsworth, 1969; Bowlby, 1982). It is proposed those attachment styles provide a framework for future romantic relationships, (Ainsworth, 1969; Bowlby, 1982), and those with an insecure attachment style are more likely to use IPV in order to express emotions, and enable their relationship needs to be met (Godbout, Dutton, Lussier & Sabourin, 2009; Mikulincer & Shaver, 2003).

IPV and Post-Traumatic Stress Disorder (PTSD)

PTSD is an anxiety disorder caused by, directly or indirectly, experiencing a distressing and often life-threatening event. Symptoms can include 'reliving' the event (e.g. flashbacks and nightmares), feelings of isolation, sadness, anger, and concentration difficulties, that persist after the event, and impact daily functioning (American Psychiatric Association (APA), 2013; National Health Service, 2022).

Suggested PTSD prevalence ranges from 39-75% for IPV survivors (Fernández-Fillol, Pitsiakou, Perez-Garcia, Teva & Hidalgo-Ruzzante, 2021; Nathanson, Shorey, Tirone & Rhatigan, 2012). Furthermore, research suggests young individuals exposed to trauma may be twice as likely to experience PTSD in adulthood, compared to those who experience the same trauma at an older age (Dunn, Nishimi, Powers & Bradley, 2017). Within anxiety disorders, PTSD is most associated with suicidal behaviour, with individuals at an increased risk of difficulties with relationships, finances and mental and physical health comorbidities (Sareen, Afifi, McMillan & Asmundson, 2011). Trauma-focused Cognitive Behavioural Therapy (TF-

CBT) is recommended by the National Institute for Health and Care Excellence (NICE) (2018) as a first-line treatment for PTSD.

Cognitive model of PTSD

TF-CBT is commonly guided by Ehlers and Clark's (2000) Cognitive-Model of PTSD which proposes that the following areas maintain PTSD through creating a sense of current threat to the individual:

i) Negative appraisals of the trauma and the aftermath: negative evaluations of oneself, others and the world (i.e. 'the world is a dangerous place').

ii) Disjointed trauma memories: memories which are difficult to retrieve and poorly discriminated from other memories, making it difficult to discriminate between stimuli present during the trauma and harmless stimuli.

iii) Unhelpful coping strategies (including safety behaviours, unhelpful responses to intrusion, and persistent dissociation). Safety behaviours are actions individuals take to prevent a feared threat (i.e. avoidance). Unhelpful responses to intrusions refer to responses such as thought suppression, numbing and rumination. Persistent dissociation refers to a sense of detachment or depersonalisation, to protect from overwhelming emotions.

Longitudinal studies have shown that appraisals (Brown, Belli, Asnaani & Foa, 2019), disjointed memories (Freeman et al., 2013) and unhelpful coping strategies (including unhelpful responses to intrusions, persistent dissociation and safety behaviours such as avoidance) (Beierl, Böllinghaus, Clark, Glucksman & Ehlers, 2020; Kleim, Ehlers & Glucksman et al., 2012; Thompson, Fiorillo, Rothbaum, Ressler & Michopoulos, 2018) predict future PTSD symptoms; however, research has not specifically investigated this with Y-IPV survivors . Additionally, elements of the Cognitive-Model are often researched in isolation, and limited research has assessed the relative impact of each element in predicting PTSD. Furthermore, the Cognitive-Model has been found to predict PTSD symptoms in

young adults; however this research indicated that certain elements of the Cognitive-Model, such as negative appraisals, may be more robust PTSD predictors in this population (Hiller, Meiser-Stedman, Elliott, Banting & Halligan, 2021). Furthermore, the elements of the Cognitive-Model may vary by trauma type; with interpersonal trauma being associated with more negative appraisals than accidental trauma (Beierl et al., 2020).

IPV and shame

Shame refers to how one perceives being evaluated by others, and how one evaluates themselves (Øktedalen, Hagtvet, Hoffart, Langkaas & Smucker, 2014), and has been found to be an emotional repercussion of trauma. Taylor (2015) argues that research has neglected the obvious by not considering shame's impact on PTSD. Dolezal & Gibson (2022) propose that sensitivity to shame is crucial to addressing trauma and enabling good clinical practice.

Shame is associated with increased PTSD symptoms (Cunningham, 2020; Saraiya & Lopez-Castro, 2016) and is a proposed barrier to accessing treatment and disclosing abuse (Dolezal & Gibson, 2022; La Bash & Papa, 2014). Shame is linked to elements of Ehlers and Clark's (2000) Cognitive-Model. It has been hypothesised that shame leads to increased maladaptive appraisals, particularly about oneself, through viewing the trauma as one's fault, oneself as defective and seeing oneself as less attractive to others (Harman & Lee, 2010; Lee et al., 2001). Shame is also linked to an increased use of unhelpful coping strategies, such as avoidance and thought suppression, due to attempts to regulate the unpleasant feeling of shame (Van Vliet, 2010). However, how shame interacts specifically with the Cognitive-Model, or PTSD symptom severity in Y-IPV survivors, has not been investigated.

The current study

IPV has a high prevalence in youth, a crucial and vulnerable developmental period. The Cognitive-Model is used to inform TF-CBT, a first-line treatment for PTSD. Furthermore, shame has been linked to PTSD and to facets of the Cognitive-Model. However, to date research into whether the Cognitive-Model predicts PTSD in Y-IPV

survivors, the aspects that are the most impactful, and the impact of shame has been limited. A better understanding of this would enable theory-practice links, by identifying Cognitive-Model aspects likely to be most important to target during treatment.

The present study employs a longitudinal quantitative approach. The first objective was to assess if the Cognitive-Model predicts future PTSD symptoms in this population. The second objective was to examine how trauma-focused shame predicts future PTSD symptoms. Finally, the study investigated how trauma-focused shame moderates the relationship between the Cognitive-Model and future PTSD symptoms.

Given that negative appraisals, disjointed memories, and unhelpful coping strategies have been found to predict PTSD symptoms (Ehlers and Clarke, 2000; Ehlers and Wild, 2015), and shame has been linked with PTSD symptoms and the Cognitive-Model (Harman & Lee 2010; Saraiya & Lopez-Castro, 2016), the following hypotheses were proposed (Table 1).

Table 1

The study hypotheses.

Number	Hypothesis
Hypothesis-1	At time-1, more disjointed trauma memories, higher frequency of unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories) and more negative appraisals will result in higher PTSD symptom severity at time-2.
Hypothesis-2	At time-1, more disjointed trauma memories, higher frequency of unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories) and more negative appraisals will result in higher PTSD symptom severity at time-2, when relevant covariates (including time-1 PTSD symptoms) are controlled for.
Hypothesis-3	Trauma-related shame at time-1 will predict PTSD symptoms at time-2.
Hypothesis-4	Trauma-related shame at time-1 will predict PTSD symptoms at time-2 when relevant covariates (including time-1 PTSD symptoms) are controlled for.
Hypothesis-5	Trauma-related shame at time-1, will moderate the relationship between the Cognitive-Model elements (disjointed trauma memories, unhelpful coping strategies and negative appraisals) at time-1, with PTSD symptoms at time-

2, when relevant covariates (including time-1 PTSD symptoms) are controlled for.

Method

Design

A within-groups method was employed. Data were collected at two timepoints using online self-report questionnaires, between January 2022-February 2023. The study aimed for six months between timepoints (based on other studies using similar time periods: Beierl, 2020; Ehring, Ehlers & Glucksman, 2008). A minimum of two months between timepoints was allowed. The mean time between time-1 and time-2 was 5.61 months (minimum = 2.23 months, maximum = 8.75 months, SD = 1.53 months).

As recommended by the National Institute for Health Research (2018) individuals with lived and professional experience were consulted in the study design; feedback stated that the survey did not feel too burdensome or upsetting to complete. Based on feedback, wording was changed to emphasise that at any point participants could stop and/or access signposting information.

Participants

Participants were individuals aged 18-24 who had experienced IPV between the ages of 16-24. Participants were recruited from the general population and required to be English-speaking and residing in the UK to enable appropriate signposting. To maximise safety, they were required to not be in a relationship with the IPV perpetrator or another current relationship with IPV. A minimum of 10 weeks since IPV was required due to PTSD symptoms in this initial period being likely to subside (American Psychiatric Association, 2013; Brewin, 2003).

A G*Power priori analysis based on Beierl et al., (2020)'s study using similar measures and obtaining a medium effect size (d = .4), indicated a sample size of 74 was required for a 95% chance of detecting a medium effect size.

Participants were recruited through email and social media (21.12%). This involved emailing organisations, charities and social media influencers with an interest in Intimate Partner Violence, and then asking them to share the study poster (see appendix 3.A) via Email, Instagram, Twitter and/or Facebook. Participants were also recruited via Prolific, an online recruitment platform (78.88%) with over 120,000 participants, largely sourced through word of mouth, who are paid to take part in research. The study information sheet was shared (Appendix.3.C) on Prolific, and eligible participants invited to complete. Participants recruited via Prolific were renumerated £1.50 for part one, and £2.50 for part two (a 25% service fee was then paid to Prolific, and 20% Value Added Tax applied). Due to drop out between time-1 and time-2, the budget of £464 allowed for a total of 67 participants to be recruited before budget depletion.

Measures

Self-report standardised study measures relating to the Cognitive-Model, trauma-related shame and PTSD symptoms are outlined in Table 2.

Table 2

Study measures relating to the Cognitive-Model, trauma-related shame and PTSD symptoms.

Item Measured	Measurement
Negative appraisals [1]	The Post Traumatic Cognitions Inventory (Foa, Ehlers, Clark, Tolin & Orsillo 1999). This is a 36-item questionnaire where participants rate appraisals from 1-7 (totally disagree-totally agree). Higher scores indicate more negative appraisals. This measure has shown to have excellent internal consistency and good test-retest reliability, including in samples with sexual

	assault survivors (Foa et al., 1999). (α = .97 for the current study).
Disjointed Memories[1]	The Trauma Memory Questionnaire, developed by Halligan, Michael, Clark and Ehlers (2003): only the subscale assessing disjointed memories was used. Participants rate five statements from 0-4 (not at all-very strongly) on the extent that the statements apply to their trauma memory in the past week. Higher scores indicate more disjointed memories. This questionnaire has been found to have satisfactory reliability in studies with survivors of interpersonal trauma (assault) (Beirl et al., 2020; Halligan, Clark & Ehlers, 2002). (α = .82 for the current study).
Unhelpful coping strategy: safety behaviours[1]	Safety Behaviour Questionnaire from the Oxford Centre for Anxiety Disorders and Trauma (OXCADAT), adapted from Dunmore, Clark and Ehlers (1999; 2001). Participants rate 14 items that assess the extent to which participants used a range of safety behaviours in the past month, from 1-4 (never-always) and if they do this more since the trauma (Yes/No). Higher scores indicate the use of more safety behaviours. This measure has shown good reliability with survivors of assault (Beirl et al., 2020). (α = .90 for the current study).
Unhelpful coping strategy: persistent dissociation[1]	Trait-State Dissociation Scale from OXCADAT adapted from Murray, Ehlers and Mayou (2002). Participants rate 15 items on the extent of dissociative experiences in the past week from 0-3 (never-always). Higher scores indicate more dissociative experiences. It has shown good reliability and validity with both interpersonal trauma survivors (assault) and student volunteers (Halligan, Clark & Ehlers, 1999; 2002). (α = .94 for the current study).
Unhelpful coping strategy: responses	The Response to Intrusions Questionnaire from OXCADAT adapted from Clohessy and Ehlers (1999) and Murray, Ehlers and Mayou (2002). This

to intrusions[1]	contains 19 items assessing unhelpful responses to intrusive trauma memories in the past week from 0-3 (never-always) focusing on thought suppression, rumination, and numbing. Higher scores indicate more unhelpful responses to intrusive memories. This questionnaire has been found to have good reliability in studies with survivors of interpersonal trauma (assault) (Beirl et al., 2020; Halligan, Clark & Ehlers, 2002). (α = .88 for the current study).
Trauma-related shame[1]	Trauma-Related Shame Inventory (Øktedalen et al., 2014). Participants rate 24 statements, from 1-4 (not true of me-completely true of me) to the extent that they apply to them over the past week. Higher scores indicate a higher experience of trauma-related shame. This measure has shown good validity with individuals with PTSD symptoms and women with histories of interpersonal violence (Jones & Badour, 2023; Øktedalen et al., 2014). (α = .98 for the current study).
PTSD symptom severity[2]	The Post-Traumatic Stress Disorder Checklist (PCL-5; Weathers, Litz, Keane, Palmieri, Marx & Schnurr, 2013) assesses 20 Diagnostic and Statistical Manual of Mental Disorder's PTSD symptoms (APA, 2000). Participants rate how much in the last week they have been bothered by these symptoms from not at all-extremely. There is a range of suggested cut-off scores for indicating the presence of probable PTSD, but studies have indicated scores ranging from 28-31 and above suggest the presence of PTSD (Ashbaugh, Houle-Johnson, Herbert, El-Hage, Brunet, 2016; Blevins, Weathers, Davis, Witte, Domino, 2015). It has demonstrated strong validity and reliability with trauma exposed college survivors (Blevins et al., 2015). (α = .95 at time-1 and α = .96 at time-2 for the current study).

Note. [1]The current paper used these measures at time-1 only. [2]The current paper used the measure at time-1 and time-2.

A number of measures were taken to describe the sample and assess for potential covariates. These included sociodemographic characteristics, time since IPV and IPV disclosure. A measure of depression and anxiety was included to ensure that the PTSD measure was not measuring depression or anxiety. These measures are displayed in Table 3.

Table 3

Measures taken to describe the sample and assess for covariance.

Item Measured	**Measurement**
Sociodemographic measures	Self-reported age, gender, ethnicity, educational attainment, relationship status and employment status.
Disclosure	Self-reporting either 'yes' or 'no' to whether or not they have disclosed the IPV to another person.
Time since IPV	Self-reported time since the most recent incident of IPV experienced.
Depression	The Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983); participants rate seven questions on a four point severity scale to assess depression. Scores of 0-7 indicate no evidence of clinical depression, 8-10 mild depression, 11-14 moderate depression and 15-21 severe depression (Snaith, 2003). The HADS is shown to be a valid and reliable measure in community settings (Snaith, 2003). (α = .87 for the current study).
Anxiety	The Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983); participants rate seven questions on a four point severity scale to assess anxiety. Scores of 0-7 indicate no evidence of clinical anxiety, 8-10 mild anxiety, 11-14 moderate anxiety and 15-21 sever anxiety (Snaith, 2003). (α = .85 for the current study).

Note. α = the Cronbach's alpha score for the measures in the current study. The current paper used

these measures at time-1 only.

Procedure

Study information and questionnaires were presented via Qualtrics, a platform which enables the creation of questionnaires, and collection and exportation of participant responses. Signposting information was available on the participant information sheet (PIS) and the debrief information (available at each timepoint, regardless of questionnaire completion). For those who completed the study via Prolific, at each timepoint, a code to submit to Prolific for payment was given.

Procedure (not via Prolific):

1. Participants clicked a link to the PIS where they could electronically confirm the study information had been read, they met the eligibility criteria, agreed to be contacted via their given email.
2. Time-1: participants were emailed the time-1 questionnaire link with a unique ID. If no response after 10 days, two prompt emails were sent 10 days-1 month after the initial email.
3. One email was sent between time-1 and time-2 containing study updates for engagement.
4. Time-2 (2-6 months post time-1): participants were emailed the time-2 questionnaire link. If there was no response, up to two prompt emails were sent 10 days-1 month of the initial time-2 email.

Procedure (via Prolific):

1. Participants viewed the PIS listed on Prolific, and completed an initial pre-screening questionnaire to ensure they met the eligibility criteria.
2. Eligible participants were invited via Prolific to view the PIS again, complete the consent form and time-1 questionnaires. Consent was given electronically by stating

their Prolific ID number and ticking a box confirming this information had been read, they met the eligibility criteria.

3. Time-2 (2-6 months post time-1). Participants who completed time-1 were invited via Prolific to complete time-2 questionnaires.

Governance and ethics

Ethical approval was obtained from the Oxford University Central Research Ethics Committee (R78205/RE001; Appendix B). Data collection and management adhered to Oxford University's information and governance policy. Access to data was password-protected and restricted to the research team. The key linking participant's email-addresses to their unique ID was destroyed once the data had been exported.

Funding for participant payment was provided by the Oxford Institute of Clinical Psychology.

PIS and debrief provided information on signposting, reporting IPV, and rights to withdraw. No questionnaire directly assessed risk.

Statistical analysis

Statistical analysis was performed using IBM SPSS (Version 27) and the PROCESS Macro (Version 3; Hayes, 2017). For the purpose of statistical analysis, due to small sample sizes in these categories, response options within educational attainment (secondary school/A-level/BTEC or bachelor's degree and above), sexuality (heterosexual or LGBTQ+), relationship status (in a relationship or single) and ethnicity (white or non-white) were grouped as indicated in the brackets. Data less than 90% completed was removed (N = 14 for time-1) and (N = 5 for time-2); no responses had between 90-99% completed. Visual inspection of the data indicated no pattern of differences between incomplete and complete responses.

Chi-squared and t-tests were used to check for differences at time-1 between those who completed only time-1 (N = 69) and those who completed time-1 and time-2 (N = 85);

revealing no difference in gender, sexuality, educational attainment, employment, relationship status or ethnicity. T-tests revealed no difference between those who completed only time-1, compared to time-1 and time-2 in age, time since IPV, unhelpful coping strategies, disjointed memories, negative appraisals, anxiety symptoms and PTSD symptoms. Those who completed time-1 only were found to have significantly more depression symptoms (M = 7.12, SD = .51) than those who completed both time-1 and time-2 (M = 7.01, SD = 4.95), $t(152) = .14$, $p = .02$. Only the data for those who completed both time-1 and time-2 were included in the subsequent analysis.

Data were screened for normality and outliers. Skewness and Kurtosis for all variables was within the acceptable limits of -2 to 2 (Skewness range: -1.10–.56; Kurtosis range: -1.04-.21), indicating normal distribution (George & Mallery, 2010). Any data more than two standard deviations from the mean, was checked by inspecting quantile-quantile plots; no data required removal.

Descriptive statistics were used to summarise sociodemographic information and scores on the self-report questionnaires.

Data relating to the hypothesis-1, hypothesis-2 and hypothesis-4 were analysed using stepwise linear regressions. Stepwise linear regressions were used as in a case like this, with multiple independent variables, it is useful for establishing which best predict a dependent variable (Field, 2005). Hypothesis-3 was analysed using a linear regression. Finally, hypothesis-5 was analysed using the Hayes (2017) PROCESS macro, which computes a series of regressions between the independent and dependent variable, alongside the moderation variable, to explain how the strength of the relationship between the independent and dependent variable change, when the impact of the moderator is considered. Correlational analysis, t-tests and ANOVA’s identified relevant covariates included in hypothesis-2, hypothesis-4, and hypothesis-5 (Field, 2013).

Regression and PROCESS macro assumptions were checked (multicollinearity, autocorrelation, normality, homoscedasticity); none were found to be violated, therefore no data adjustments were made. Normality was checked as above. Multicollinearity was checked for all independent variables with each other (time-2 PTSD symptoms) indicating an acceptable tolerance level of above .1 for all variables (range: .17-.38), and an acceptable variance inflation factor score of below 10 (range: 2.00-5.87) (Tabachnick & Fidell, 2001; Vittinghoff, Glidden, Shiboski & McCulloch, 2011). Scatter plots were assessed visually and indicated acceptable homoscedasticity between the dependent and residual variables. A Dunbar-Watson test between all variables and time-2 PTSD symptom severity indicated no autocorrelation (DW = 1.99) (Field, 2013).

Results

Sample characteristics

Table 4 presents sociodemographic characteristics of the sample. The majority of the sample were female (N = 70, 82.35%), aged 20-24 (N = 79, 92.94%), white (N = 65, 76.47%), straight or heterosexual (N = 46, 54.12%) and in a relationship (N = 55, 64.71%). For 48.24% (N = 41) of the sample, it had been over three years since their last IPV experience, with 72.94% (N = 62) of the sample having disclosed their IPV to another person.

Table 4

Sociodemographic characteristics of the sample (N=85).

Variable	Frequency	Percentage (%)
Gender		
Male	13	15.29
Female	70	82.35

Non-binary	2	2.35
Age (M = 22.05 years, SD = 1.68 years)		
18	2	2.35
19	4	4.71
20	10	11.76
21	17	20.00
22	16	18.82
23	11	12.94
24	25	29.41
Time since IPV		
10 weeks - 3 months	3	3.53
3 months - 6 months	8	9.41
6 months - 1 year	6	7.06
1 year - 2 years	10	11.76
2 years - 3 years	17	20.00
More than 3 years	41	48.24
Sexuality		
Straight or Heterosexual	46	54.12
Gay or Lesbian	7	8.24
Bisexual	22	25.88
Other sexual orientation	5	5.88

Missing	5	5.88
Ethnicity		
White	65	76.47
Asian/British Asian	9	10.59
Mixed/Multiple ethnic groups	2	2.35
British Black/African/Caribbean/Black British	3	3.53
Arab	3	3.53
Other	3	3.53
Educational attainment		
Secondary school up to 16 years	3	3.53
Higher or secondary or further education (A-levels, BTEC, etc.)	33	38.82
Bachelor’s degree	37	43.53
Master’s degree	12	14.12
Relationship status		
Single	29	34.12
In a relationship	55	64.71
Married	1	1.18
Disclosure of IPV		
No	23	27.06
Yes	62	72.94

Note. M = mean age in years. SD = standard deviation. IPV = Intimate Partner Violence.

Table 5 presents descriptive statistics for each questionnaire. At both timepoints, on average the PTSD symptom scores indicate probable presence of PTSD, or just below threshold (score above 28-31 indicates probable PTSD diagnosis; Ashbaugh et al., 2016; Blevins et al., 2015). Scores for anxiety and depression indicate that on average, individuals were experiencing mild anxiety and just below threshold for mild depression (the presence of mild depression or anxiety is indicated by a score above 7) (Snaith, 2003).

Table 5

Descriptive statistics for each questionnaire (N = 85).

Measure	Minimum	Maximum	M (SD)
Unhelpful coping mechanisms:			
The Response to Intrusions Questionnaire	4	57	28.92 (10.03)
Safety Behaviour Questionnaire	3	42	22.27 (8.78)
Trait-State Dissociation Scale	0	54	16.82 (12.79)
Post Traumatic Cognitions Inventory	36	241	139.73 (46.15)
The Trauma Memory Questionnaire	0	16	6.67 (4.17)
Trauma-Related Shame Inventory	0	68	23.80 (18.84)
The Post-Traumatic Stress Disorder Checklist:			
Time-1	0	80	31.22 (19.55)
Time-2	0	80	28.58 (20.64)

The Hospital Anxiety and Depression Scale:			
Anxiety subscale	1	21	9.96 (4.73)
Depression subscale	0	17	7.01 (4.95)

Note. M = mean age in years. SD = standard deviation. PTSD = Post Traumatic Stress Disorder .

Hypothesis-1: At time-1, more disjointed trauma memories, higher frequency of unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories) and more negative appraisals will result in higher PTSD symptom severity at time-2.

A stepwise linear regression showed that negative appraisals, safety behaviours and unhelpful responses to intrusive memories predicted PTSD symptom severity at time-2, R^2_{adj} = .57, $F(3, 81) = 37.96$, $p = <.001$. Persistent dissociation and disjointed memories at time-1 did not explain a significant amount of the variance in PTSD symptom severity at time-2.

Table 6

Regression coefficients for Cognitive-Model measures at time-1 (disjointed memories, negative appraisals, unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories)) predicting PTSD symptom severity at time-2.

Variable	B	95% CI	β	t	p
Unhelpful coping mechanisms:					
Responses to intrusive	.60	[.20, 1.01]	.29	.20	.04

memories[1]					
Safety behaviours[2]	.81	[.36, 1.26]	.35	3.58	<.001
Persistent dissociation[3]			.18	1.73	.09
Negative appraisals[4]	.132	[.06, .20]	.30	.06	<.001
Disjointed memories[5]			.07	.83	.41

Note. R^2_{adj} = .57 (N = 85, p = <.001). p = probability statistic. CI = confidence interval for B. [1] As measured by the Response to Intrusions Questionnaire (Clohessy and Ehlers, 1999; Murray, Ehlers and Mayou, 2002). [2]As measured by the Safety Behaviour Questionnaire (Dunmore, Clark and Ehlers, 2001). [3]As measured by the Trait-State Dissociation Scale and Murray, Ehlers and Mayou, 2002). [4]As measured by the Post Traumatic Appraisals Inventory (Foa et al., 1999). [5]As measured by the Trauma Memory Questionnaire (Halligan et al., 2003).

Hypothesis-2: At time-1, more disjointed trauma memories, higher frequency of unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories) and more negative appraisals will result in higher PTSD symptom severity at time-2, when relevant covariates (including time-1 PTSD symptoms) are controlled for.

T-tests indicated no significant relationship between PTSD symptom severity and educational attainment, sexuality, ethnicity or disclosure. An ANOVA revealed no relationship between gender and PTSD symptom severity. A Pearson's correlation showed no significant correlation between time between completing time-1 and time-2 with PTSD symptom severity.

There was a significant correlation between PTSD symptom severity at time-2 and age $r(83) = -.29$, $p = .01$; time since IPV $r(83) = -.27$, $p = .01$; anxiety $r(83) = .59$, $p = <.001$; depression $r(83) = .70$, $p = <.001$ and PTSD symptom severity at time-1 $r(83) = .70$, $p =$

<.001 . Therefore, these covariates were controlled for in the regression to better assess the amount of variance predicted by the Cognitive-Model variables.

A stepwise multiple linear regression showed when the variance associated with age, anxiety, depression, time since IPV and PTSD symptom severity at time-1 was controlled, only safety behaviours significantly predicted variance in PTSD symptom severity at time-2 R^2_{adj} = .63, $F(7, 77) = 21.30$, p <.001. The addition of disjointed memories, negative appraisals, unhelpful responses to intrusive memories and persistent dissociation did not explain any more of the variance in PTSD symptom severity at time-2.

Table 7

Regression coefficients for Cognitive-Model measures at time-1 (disjointed memories, negative appraisals, unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories)) predicting PTSD symptom severity at time-2, when age, time since IPV, depression, anxiety and time-1 PTSD symptoms are controlled.

Variable	B	95% CI	β	t	p
Unhelpful coping mechanisms:					
Responses to intrusive memories[1]			.16	1.54	.13
Safety behaviours[2]	.71	[.31, 1.14]	.31	3.40	<.001
Persistent dissociation[3]			.01	.09	.93
Negative appraisals[4]			.02	.15	.88
Disjointed memories[5]			.04	.39	.70
PTSD symptom severity time-1[6]	.38	[.09, .67]	.36	2.64	.01

Anxiety[7]	-.33	[-1.36, .69]	-.08	-.65	.52
Depression[7]	1.39	[.55, 2.23]	.33	3.28	<.01
Age	-1.70	[-3.40, .01]	-.14	-1.98	.05
Time since IPV	1.39	[-.83, 3.61]	.10	.10	.22

Note. R^2_{adj} = .63 (N = 85, p = <.001). p = probability statistic. CI = confidence interval for B. [1] As measured by the Response to Intrusions Questionnaire (Murray, Ehlers and Mayou, 2002). [2]As measured by the Safety Behaviour Questionnaire (Dunmore, Clark and Ehlers, 2001). [3]As measured by the Trait-State Dissociation Scale (Murray, Ehlers and Mayou, 2002). [4]As measured by the Post Traumatic Appraisals Inventory (Foa et al., 1999). [5]As measured by the Trauma Memory Questionnaire (Halligan et al., 2003). [6]As measured by the Posttraumatic Stress Disorder Checklist (PLC-5) (Weathers et al., 2013). [7]As measured by the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983).

Hypothesis-3: Trauma-related shame at time-1 will predict PTSD symptoms at time-2.

A linear regression showed that alone, trauma-related shame predicted PTSD symptom severity, R^2_{adj} = .18, F(1, 83) = 19.44, p = <.001.

Table 8

Regression coefficient for trauma-related shame predicting PTSD symptom severity at time-2.

Variable	B	95% CI	B	t	p
Trauma-related shame[1]	.48	[.11, .44]	.44	4.41	<.001

Note. R^2_{adj} = .18 (N = 85, p = <.001). p = probability statistic. CI = confidence interval for B. [1] As measured by the Trauma-related Shame Inventory (Øktedalen et al., 2014).

Hypothesis-4: Trauma-related shame at time-1 will predict PTSD symptoms at time-2 when relevant covariates (including time-1 PTSD symptoms) are controlled.

A stepwise linear regression indicated that trauma-related shame did not predict a significant amount of variance in PTSD symptom severity when controlling for anxiety, depression, PTSD symptom severity at time-1, age, and time since IPV. In this model anxiety, depression, PTSD symptom severity at time-1, age, and time since IPV predicted PTSD symptoms at time-2, $R^2_{adj} = .58$, $F(5, 79) = 23.75$, $p = <.001$, with trauma-related shame not explaining a significant additional amount of the variance in PTSD symptoms.

Table 9

Regression coefficient for trauma-related shame predicting PTSD symptom severity at time-2, when age, time since IPV, depression, anxiety and time-1 PTSD symptoms are controlled.

Variable	B	95% CI	β	t	p
Trauma-related shame[1]			-.08	-.83	.41
PTSD symptom severity time-1[2]	.48	[.17, .78]	.45	3.13	<.01
Anxiety[3]	-.06	[-1.14, 1.02]	-.01	-.11	.92
Depression[3]	1.82	[.95, 2.68]	.44	4.19	<.001
Age	-1.48	[-3.30, .33]	-.12	-1.62	.11
Time since IPV	2.23	[-.08, 4.55]	.16	1.92	.06

Note. $R^2_{adj} = .58$ (N = 85, p = <.001). p = probability statistic. CI = confidence interval for B. [1] As measured by the Trauma-related Shame Inventory (Øktedalen et al., 2014). [2]As measured by the Posttraumatic Stress Disorder Checklist (PLC-5) (Weathers et al., 2013). [3]As measured by the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983).

Hypothesis-5: Trauma-related shame at time-1, will moderate the relationship between the Cognitive-Model elements (disjointed trauma memories, unhelpful coping strategies and negative appraisals) at time-1, with PTSD symptoms at time-2, when relevant covariates (including time-1 PTSD symptoms) are controlled for.

The PROCESS macro (Hayes, 2017) was used to investigate whether the relationship between each variable of the Cognitive-Model (disjointed memories, negative appraisals, unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories)) with PTSD symptom severity, was moderated by the amount of trauma-related shame experienced. For each analysis, the covariates of age, time since IPV, PTSD, anxiety, depression, and symptom severity at time-1 were controlled for. Results (displayed in Table 10), indicate that trauma-related shame did not moderate the relationship between any of the variables with PTSD symptom severity at time-2.

Table 10

Results from the moderation analysis, showing the moderation impact of trauma-related shame, with each variable of the Cognitive-Model (disjointed memories, negative appraisals, unhelpful coping strategies (persistent dissociation, safety behaviours and unhelpful responses to intrusive memories)) when predicting PTSD symptoms at time-2, when age, time since IPV, PTSD, anxiety depression and symptom severity at time-1 were controlled for.

Variable	B	95% CI	t	p	R^2 change
Unhelpful coping mechanisms:					
Responses to intrusive memories[1]	-.01	[-.03, <.01]	-1.57	.12	.01
Safety behaviours[2]	-.01	[-.02, .01]	-.88	.38	<.001

Persistent dissociation[3]	.01	[-.01, .02]	1.17	.25	<.01
Negative appraisals[4]	<.01	[<-.01, .01]	1.15	.25	.01
Disjointed memories[5]	.02	[-.02, .06]	1.17	.25	.01

Note. All variables were mean centred prior to analysis. R^2 change = the change in variance of PTSD symptom severity at time-2 variance, that was explained by inclusion of the moderating impact of trauma-related shame. p = probability statistic. CI = confidence intervals for B. [1] As measured by the Response to Intrusions Questionnaire (Murray, Ehlers and Mayou, 2002). [2]As measured by the Safety Behaviour Questionnaire (Dunmore, Clark and Ehlers, 2001). [3]As measured by the Trait-State Dissociation Scale (Murray, Ehlers and Mayou, 2002). [4]As measured by the Post Traumatic Appraisals Inventory (Foa et al., 1999). [5]As measured by the Trauma Memory Questionnaire (Halligan et al., 2003).

Discussion

This study investigated whether Ehlers and Clark's (2000) Cognitive-Model predicts PTSD symptoms in Y-IPV survivors without controlling for covariates (hypothesis-1) and with controlling for covariates (hypothesis-2). Without controlling for relevant covariates only safety behaviours, responses to intrusions and negative appraisals predicted future PTSD symptoms, explaining 57% of the variance in symptoms. When controlling for relevant covariates (age, time since-IPV, PTSD symptoms at time-1, anxiety and depression) only safety behaviours significantly predicted future PTSD symptoms, with covariates and safety behaviours explaining 63% of the variance. Therefore, hypothesis-1 and hypothesis-2 were only partially supported. This provides partial support for Ehlers and Clark's (2000) Cognitive-Model; suggesting that in this population, safety behaviours are a unique predictor of future PTSD symptoms. The current findings align with research that trauma-exposed children whose parents encourage avoidance safety behaviours, show more PTSD symptoms

(Hiller et al., 2018). There are many possible explanations for this. Using safety behaviours can result in misinterpreting the non-occurrence of the feared outcome as being due to the safety behaviour (Salkovskis, 1991), thus maintaining a sense of threat. Whilst negative appraisals and unhelpful responses to intrusions predicted future PTSD symptoms when covariates were not considered; it indicates that together safety behaviours, anxiety, depression, age, time since IPV and PTSD symptoms at time-1 are better predictors of future PTSD. However, it is noted that the PCL-5 (Weathers et al., 2013), measuring PTSD symptom severity, includes multiple questions related to maladaptive appraisals and responses to intrusions, but less related to safety behaviours. Therefore, the inclusion of time-1 PTSD symptom severity as a covariate, may have reduced the statistical significance of maladaptive appraisals and responses to intrusions. Therefore, a cautious approach should be taken to considering these as less predictive elements. The current findings are incongruent with research indicating maladaptive appraisals are most predictive of PTSD (Hiller et al., 2021) in young adults, however this study was not with IPV survivors, suggesting that Cognitive-Model's predictive ability may differ by trauma type. It has also been proposed that safety behaviours can be driven by maladaptive appraisals (e.g. practising avoidance due to beliefs that the world is unsafe) and those who experience IPV, as opposed to other trauma, are more likely to view the world as dangerous (Forbes et al., 2013). Therefore, it is possible other elements of the Cognitive-Model indirectly predict future PTSD symptoms through their impact on safety behaviours. Future studies might usefully explore such relationships amongst the Cognitive-Model variables. Disjointed memories were the least predictive of PTSD symptoms; it may be that whilst disjointed memories are a symptom of PTSD in IPV survivors (Kleim, Wallott & Ehlers 2008) they are less integral to the maintenance of PTSD symptoms.

The study's secondary aim was to investigate whether trauma-related shame predicts PTSD symptoms without controlling for covariates (hypothesis-3) and with controlling for covariates (hypothesis-4). Without controlling for covariates, trauma-related shame predicted future PTSD symptoms, explaining 18% of the variance in symptoms; thus supporting hypothesis-3. When controlling for covariates (age, time since IPV, PTSD symptoms at time-1, anxiety and depression); trauma-related shame no longer predicted future PTSD symptoms, thus not supporting hypothesis-4. Finally, trauma-related shame did not moderate the relationship between any elements of the Cognitive-Model and future PTSD symptoms when covariates were controlled for, thus hypothesis-5 was not supported. These findings align with research suggesting shame is associated with higher PTSD symptoms (Cunningham, 2020; Saraiya & Lopez-Castro, 2016); however, they suggest that it is not a significant predictor of future PTSD symptoms when other relevant factors are taken into account; nor does it moderate between variables in the cognitive model and future PTSD symptoms.

As the time since IPV increased, the future PTSD symptom severity decreased. Possible explanations for this include the influence of systemic factors (e.g. social support) (Johansen, et al, 2022), and increased time enabling more opportunity for participants to have received PTSD treatment, thus reducing symptoms. Those of a younger age were significantly more likely to experience more PTSD symptoms at time-2; this suggests age may be a vulnerability factor for PTSD in this population.

Clinical implications

The findings of this study partially support the use of TF-CBT, which is based on Ehlers and Clark's (2000) Cognitive-Model for PTSD in Y-IPV survivors. In particular, it suggests that TF-CBT in Y-IPV survivors may benefit from a particular focus on reducing safety behaviours. The safety behaviour questionnaire in this study particularly focused on

areas such as checking, planning and taking precautions; however, more research is needed to determine which safety behaviours are most detrimental, and thus particularly important to consider in TF-CBT for Y-IPV survivors. This study also highlights the importance of ensuring younger IPV survivors receive timely support, as they may be particularly vulnerable to experiencing PTSD symptoms. Finally, clinicians should be sensitive to the shame that may be experienced by Y-IPV survivors. This can be considerable, although it does not appear (in this study) to moderate the relationship between cognitive model variables and PTSD symptoms over time.

Strengths and limitations

This is the first study to the authors' knowledge to investigate whether the Cognitive-Model is predictive of future PTSD symptoms in Y-IPV survivors, and the impact of shame. It was also unique in that it included all key Cognitive-Model components suggested by Ehlers and Clark (2000), thus enabling an understanding of their relative predictability.

The study is limited by the representativeness of the sample, and thus its generalisability. The majority of the sample identified as white, female and all resided in the UK. Those with more symptoms of depression at time-1, were significantly less likely to complete time-2; therefore it is possible the results are less applicable to these individuals. The study did not assess IPV type or severity, and this may have enabled a better understanding of the results. Finally, results should be interpreted cautiously regarding those with more severe PTSD symptoms as approximately 56.57% were sub-threshold for probable PTSD. Thus, it is possible that Cognitive-Model and trauma-focused shame, could have been differently predictive in a more symptomatic sample.

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Executive summary

Introduction to Study

Individuals aged 16-25 are most likely to experience Intimate Partner Violence (IPV). It is estimated that between 39-75% of IPV survivors, will develop Post-Traumatic Stress Disorder (PTSD). PTSD is a debilitating anxiety disorder caused by experiencing a traumatic event; symptoms can include flashbacks, nightmares, sadness, anger, and concentration difficulties.

The National Institute for Health and Care Excellence (NICE) recommends trauma-focused Cognitive Behavioural Therapy (CBT) as a treatment for PTSD. CBT approaches to PTSD are commonly guided by Ehlers and Clark's (2000) Cognitive-Model. This model proposes that: i)negative appraisals, ii)disjointed trauma memories, and iii)unhelpful coping strategies (such as safety behaviours, unhelpful responses to intrusions and dissociation) maintain PTSD by creating a sense of current threat to the individual. However, research has not assessed if the Cognitive-Model predicts PTSD in youth IPV survivors.

Trauma-focused shame has been linked to increased PTSD symptoms and to the Cognitive-Model, but there is limited empirical research regarding this in youth IPV survivors.

This research will investigate:

1) Does the Cognitive-Model (negative appraisals, disjointed trauma memories and unhelpful coping strategies) predict future PTSD symptom severity in youth IPV survivors, including when relevant covariates are controlled for?

2) Does trauma-related shame predict PTSD symptom severity in youth IPV survivors, including when relevant covariates are controlled for?
3) Does trauma-related shame moderate the relationship between the Cognitive-Model (negative appraisals, disjointed trauma memories and unhelpful coping strategies) and future PTSD symptom severity in youth IPV survivors, when relevant covariates are controlled for?.

What did you do?

Firstly, individuals with experience were consulted in the study design and ethical approval gained from Oxford University Central Research Ethics Committee.

Participants were 85 people aged 18-24 (M = 22 years), recruited from the general population, who had experienced IPV against them between the ages of 16-24. Participants were English speaking, and UK based. To ensure safety, participants confirmed they were not currently in a relationship with the IPV perpetrator or another current relationship with IPV, and that it had been a minimum of 10 weeks since experiencing IPV (due to PTSD symptoms in this period being likely to subside).

Participants completed questionnaires at two timepoints, on average, five and a half months apart. At time-1 participants completed questionnaires measuring different parts of the Cognitive-Model (negative appraisals, disjointed trauma memories and unhelpful coping strategies) and trauma-related shame. Participants also completed questionnaires regarding sociodemographic information, PTSD symptom severity, anxiety and depression to check for their covariance. At time-2 participants completed a questionnaire assessing PTSD symptom severity.

Signposting to relevant support and how to report abuse was available at each timepoint.

What were the results?

Age, time since-IPV, depression, anxiety and time-1 PTSD symptoms were found to be significantly correlated to time-2 PTSD symptoms, and therefore were included as covariates in some of the analysis.

Without controlling for covariates, only the unhelpful coping strategies of safety behaviours and unhelpful responses to intrusions, and negative appraisals predicted future PTSD symptoms. However, when controlling for covariates (age, time since IPV, time-1 PTSD symptom severity, anxiety and depression) only the unhelpful coping strategy of safety behaviours significantly predicted future PTSD symptoms.

Without controlling for covariates, trauma-related shame predicted future PTSD symptoms. However, when controlling for covariates (age, time since IPV, time-1 PTSD symptom severity, anxiety and depression), trauma-related shame no longer predicted PTSD symptoms.

Finally trauma-related shame did not moderate the relationship between any elements of the Cognitive-Model (negative appraisals, disjointed trauma memories and unhelpful coping strategies) and future PTSD symptoms when covariates were controlled for.

What does this mean?

This provides some support for Ehlers and Clark's (2000) Cognitive-Model, and its use to inform PTSD treatment. However, it suggests that for youth IPV survivors, safety behaviours are particularly predictive of future PTSD symptoms. Safety behaviours are actions individuals take to prevent a feared threat (i.e. avoidance). Therefore, this may be an important area to focus on in treatment.

Whilst trauma-related shame was able to explain some of the variance in PTSD symptoms, results indicate that other factors are more predictive of future PTSD symptoms. It also suggests that trauma-related shame does not impact how the Cognitive-Model predicts

future PTSD. Therefore, this does not suggest that shame should be considered specifically, a target for treatment, above other areas (anxiety, depression, safety behaviours).

Being of a younger age was correlated with increased PTSD symptoms, highlighting that age may be a vulnerability factor for future PTSD; indicating the importance of ensuring youth IPV survivors have access to PTSD treatment.

Limitations

The study is limited in terms of the representativeness of the sample, and thus its generalisability. The majority of the sample identifying as white, female, and all residing in the UK. Those who presented at time-1 with more symptoms of depression were significantly less likely to complete time-2, and thus it is possible that the results are less applicable to these individuals. The study did not assess the types of IPV experienced, the severity of the IPV, or whether individuals had/were receiving treatment, and it is possible that this could have enabled a better understanding of the results. Finally, on average, participants were sub-threshold, or just meeting threshold, for a clinical level of PTSD symptoms, and thus this may limit the study's generalisability to a more symptomatic sample.

Future Research

Future research should be conducted across a more diverse sample to ensure generalisability, including a sample with higher PTSD symptoms severity. It should also endeavour to include more variables, such as the type of IPV, its severity, and whether individuals were receiving PTSD treatment.

Research should replicate these findings, including what types of safety behaviours are most influential in this population. Furthermore, more generally it should also look to include more comprehensive measures of all elements of the Cognitive-Model. It should also consider the possible impact of the Cognitive-Model elements on each other, to better understand any indirect impacts on future PTSD symptoms.

Research should look to better understand the mechanisms by which age is a vulnerability factor in this population, including by utilising longitudinal methodology.

Connecting narrative

Embarking on this thesis, I was excited about the opportunity to make a meaningful contribution to the field, but also apprehensive knowing I had much to learn in this area. However, in retrospect, this apprehension was advantageous, and motivated me to read-up on different methods and be conscious of organising my time efficiently.

When planning the projects, I was open to ideas, and organised to meet with clinicians in various fields. An interest of mine is Intimate Partner Violence (IPV) prevention and treatment. I was excited to find a supervisor who shared this interest, as well as having extensive clinical experience in this area, and thus chose to conduct two projects on this topic. My third project was regarding psychological support for parents whose babies are cared for on the neonatal unit; I was drawn to this topic both due to personal experience, and the passion of the staff in the neonatal service to conduct this project and to provide the highest standard of psychological support.

Service Improvement Project (SIP)

I began with this project as it most aligned with my previous experience, as an organisational change consultant. I valued the opportunity to grow and adapt these skills to the NHS context - something I hope to continue to do in my future career!

Given the wealth of research indicating the psychological needs and vulnerability of parents who have a baby requiring neonatal care; I was surprised by the lack of guidelines in this area, and that neonatal psychology is not universally offered.

This project highlighted the systemic factors of conducting projects within the hospital. In particular, it was required to be approved by a large number of teams. This delayed the project due to long wait-times from these teams. However, this was aided by me completing a placement in this hospital, and thus having increased direct access to different staff teams, which helped the project keep progressing. Ultimately, having the

varied expertise of these different teams enabled the best quality of project. I was particularly thankful for those with lived experience contributing to the design and wording of the project information, which was facilitated by my supervisors having strong links with relevant charity networks and support groups that I then got in touch with.

It was rewarding for the project findings to be presented at a regional Clinical Health event, and be used to contribute to a proposal to gain additional service psychological provision. Seeing the direct impact this type of work can have on service provision and thus staff and patients, has made me motivated to conduct more projects like this in the future.

Systematic Literature Review (SLR)

Prior to beginning, I spent time reading guidance, re-covering the lectures, and sought advice from peers who had extensive experience of conducting such reviews; their advice being ‘document everything you include or exclude and why!’ - a valuable piece of advice.

Despite being a substantial undertaking, with this project not being reliant on recruitment, it felt the most manageable and within my control. I had planned to complete this project last, but due to Theory-Driven Research Project recruitment difficulties, I completed this project second.

I chose this topic as, as a trainee, significant time is spent focusing on the *treatment* of distress, whereas this enabled an opportunity to instead contribute to distress *prevention*.

I was naively surprised about the time required for a SLR, and was thankful to have started early. I was grateful to work alongside a second-rater who was conducting research in a complimentary area; I enjoyed the team-work aspect, which was aided by a shared passion for the topic, and mutual reliability and organisation.

After publishing my intent to conduct this review on Prospero, an organisation contacted me to express how valuable the review would be to them. This further reinforced my conviction in the importance of the review.

I was struck by the limited research in this area from a range of cultures, and this prompted me to reflect on how when we use ‘evidence-based practice’ the potential bias this may incur if the evidence-base is from limited populations.

My supervisors’ experience with systematic reviews was particularly helpful; especially with regard to appropriately challenging me about a realistic scope, when I tried to include too many areas!

Theory-Driven Research Project (TDRP)

I have a long-standing interest in this area, which further developed following movements such as ‘Me Too’. My supervisor, experienced in the field, discussed the impact of shame, something they anecdotally noticed in clinical practice, but has limited research. After reviewing the literature, I agreed on the importance of integrating shame and understanding its link with current theory.

Given the sensitive nature of IPV, ethics was a priority. Under guidance of my supervisors, before submitting to ethics, I had conversations with the Oxford ethics team regarding the method (e.g. recruitment, age limitation etc). This enabled the ethics process, when I did apply, to be straightforward.

The input from those with lived experience was fundamental in the project; particularly in ensuring sensitive and understandable wording and signposting. It was particularly meaningful to hear they felt this research was much needed, and currently lacking.

Recruitment presented an unexpected barrier, despite trying multiple recruitment and marketing methods, recruitment reached a standstill. I consulted researchers in the

field, who recommended I use ‘Prolific’, a recruitment platform. With the agreement of my supervisors and the research team, this was approved. I was grateful and relieved that this was successful. However, this significantly delayed my project, meaning it would need to submitted last. In hindsight, I was naïve to the challenges of having two timepoints, and the participant attrition – something I will be mindful of in the future.

My supervisors were present throughout to discuss ideas and anxieties, particularly when recruitment was difficult. They were also particularly helpful when discussing the potential clinical implications of the results. I hope to publish this research, and disseminate to enable an increased understanding, and better tailored psychological support.

Acknowledgements

A massive thank you to all the participants who took their valuable time to take part in these projects; without whom this would not have been possible! I hope that I can do your contribution justice, and disseminate the results in a meaningful way!

Thank you to Myra for being consistently available, knowledgeable and very patient with my many questions and anxieties - and helping me believe in myself. Thank you Carmen, Jo, Fin and the neonatal team, for sharing your amazing knowledge, guidance and passion across my projects. Finally, thank you to my course tutors Lorna, Nicola and Sarah for your support and advice throughout this process.

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On a personal note, thank you to my friends and family. Thank you to my parents for their enduring support, not matter what it is – including my decision to change careers and pursue clinical psychology. Finally, to Nikul, for endlessly listening to me talk about my thesis, learning every acronym of the course, and reminding me that there is life outside the doctorate!

Appendices

Appendix 1.A: Search terms

OVID (Including MedLine, Embasse and PsychInfo):

((School* OR College* OR High School* OR High-School* OR Secondary School* OR Middle School* OR Middle-School* OR Sixth Form* OR Sixth-Form* OR Boarding School* OR Junior High OR Technical School*) ADJ6 (School-based Intervention* OR Education* Intervention* OR Prevent* OR Intervention* OR Therap* OR Treat* OR Programme* OR Safe Date* OR Education* Programme* OR Violence Prevention OR Abuse Prevention*)).ti,ab.

AND

(Dating Violence OR IPV OR Intimate Partner Violence OR TDV OR Teen Dating Violence OR Sexual Abuse OR Partner Abuse OR Emotional Abuse OR Sexual Harassment OR Physical Abuse OR Online Abuse OR Rape* OR Sexual Assault OR Controlling Behaviour OR Controlling Behavior OR Stalking OR Gaslight* OR Psychological Abuse OR Digital Abuse OR Electronic Abuse OR Coercive Control).ti,ab.

AND

(Teen* OR Adolescen* OR Minor* OR Young Person* OR Youth* OR Young People*).ti,ab.

CINAHL:

(School* OR College* OR High School* OR High-School* OR Secondary School* OR Middle School* OR Middle-School* OR Sixth Form* OR Sixth-Form* OR Boarding School* OR Junior High OR Technical School*) N6 (School-based Intervention* OR

Education* Intervention* OR Prevent* OR Intervention* OR Therap* OR Treat* OR Programme* OR Safe Date* OR Education* Programme* OR Violence Prevention OR Abuse Prevention*)

AND

Dating Violence OR IPV OR Intimate Partner Violence OR TDV OR Teen Dating Violence OR Sexual Abuse OR Partner Abuse OR Emotional Abuse OR Sexual Harassment OR Physical Abuse OR Online Abuse OR Rape* OR Sexual Assault OR Controlling Behaviour OR Controlling Behavior OR Stalking OR Gaslight* OR Psychological Abuse OR Digital Abuse OR Electronic Abuse OR Coercive Control

AND

Teen* OR Adolescen* OR Minor* OR Young Person* OR Youth* OR Young People*

SCOPUS

(“School*” OR “College*” OR “High School*” OR “High-School*” OR “Secondary School*” OR “Middle School*” OR “Middle-School*” OR “Sixth Form*” OR “Sixth-Form*” OR “Boarding School*” OR “Junior High” OR “Technical School*”) W/6 (“School-based Intervention*” OR “Education* Intervention*” OR Prevent* OR Intervention* OR Therap* OR Treat* OR Programme* OR “Safe Date*” OR “Education* Programme*” OR “Violence Prevention” OR “Abuse Prevention*”)

AND

“Dating Violence” OR IPV OR “Intimate Partner Violence” OR TDV OR “Teen Dating Violence” OR “Sexual Abuse” OR “Partner Abuse” OR “Emotional Abuse” OR “Sexual Harassment” OR “Physical Abuse” OR “Online Abuse” OR Rape* OR “Sexual Assault” OR

“Controlling Behaviour” OR “Controlling Behavior” OR Stalking OR Gaslight* OR “Psychological Abuse” OR “Digital Abuse” OR “Electronic Abuse” OR “Coercive Control”

AND

Teen* OR Adolescen* OR Minor* OR “Young Person*” OR Youth* OR “Young People*”

Appendix 1.B: Data extraction sheet

	Study Number			
Author				
Year				
Location (city, country)				
Methodological design				
Demographics (age, gender, ethnicity, race)				
Participant inclusion/exclusion criteria				
Type of school				
Intervention name				
Who delivered intervention and if training was required				
Method of delivery				
Topics covered in intervention				
Was the intervention				

explicitly theory-driven?				
If theory-driven, what theory/ies?				
TDV outcome measures				
Time of pre/post measures				
Results (including p value and effect size)				

Appendix 2.A: Lay summary

Understanding the psychological needs of parents of whose babies have received care on Neonatal Care Unit, and exploring the barriers to meeting these

What was this study about?

Having a baby or babies receive care on the Neonatal Unit (NNU) is a particularly difficult time for parents, and often their mental health deteriorates during this time. This can be for reasons such as worrying about their baby(ies) and their care, the shock of their baby(ies) being unwell, and having to be separated from their baby(ies). When parent's mental wellbeing suffers, it can have negative consequences on both the parents themselves, and the wellbeing of their baby(ies). For example, it can make things like bonding with their baby more difficult, and is associated with poorer baby development. Research has shown that the majority of parents do not feel like they receive sufficient support for their mental wellbeing. The NHS has identified improving psychological support for parents whose baby(ies) are receiving support on a NNU as essential, with improvements to be implemented by 2024.

What were the aims of the study?

- To understand whether the current parental psychological support at the (name of hospital removed) meets the guidelines.
- To understand strengths and weaknesses of the psychological support currently provided on the NNU from the parents perspectives.
- To understand what support parents would like to be provided with and how.
- To use the findings to give recommendations to improve psychological support for parent whose baby(ies) are receiving care in the NNU.

What did we do?

- We gathered the available UK guidelines for psychological support for parents whose baby(ies) are receiving care on an NNU. We then compared this to the current psychological support given on the NNU at the (name of hospital removed).
- 33 parents who had a baby(ies) receive care on the (name of hospital removed) NNU completed an online survey. This survey asked questions on the support they received and the support they would have liked to receive.

What did we find out?

- Overall, both the review of the guidelines, and the online parental survey identified similar strengths and gaps in provision.
- The NNU has a broad range of expertise and types of support available.
- Support was mainly received from the nurses, SSNAP team or the psychology team.
- Those who received support were satisfied with this.
- Parents particularly found that being able to talk about their experiences with staff was helpful, and would value being able to do this more.
- There is a gap in supporting the parents' transition to home, peer-to-peer support, and including parents in the design of the psychological support offered on the NNU.
- Parents would like staff to approach them directly to provide support, and would also like specified ways in which they can approach staff.

- Barriers to receiving support include not being aware that psychological support is available; feeling there is a stigma to receiving support; feeling more privacy is needed to receive support; not seeing psychology staff on the NNU; and not wanting to be separated from their baby(ies).
- It is possible that further staff resource may be required to provide both the support requested from parents, and to meet guidelines.

What did we recommend?

- The findings and recommendations of this report should be shared with service staff and their opinions on their capacity, motivation, ability and how comfortable they feel to provide recommended support gained. For any gaps in knowledge or ability, appropriate training should be provided. Where there is insufficient staff resource, staff provision should be increased.
- Develop information packs outlining available psychological support. These should be shared with parents upon their baby(ies) admission, and placed on the wards. These information packs should normalise the need for support, and that support can be received in privacy. It should also be ensured that NNU are aware of available support, so that they can share this verbally if required.
- Increased presence of psychology staff on the wards, be this through walk-rounds or protected time on the ward.
- Develop guidelines for staff on how and when to approach and offer support. Ensure any staff providing support has appropriate supervision for this.
- Provide designated times and methods for parents to contact Psychology or SSNAP staff for support, e.g. ‘drop-in’s’ or contact numbers.
- If providing support in private, to be aware that it may be difficult for the parent to be separated from their baby(ies), and make adjustments for this if necessary.
- Provide support for the transition from hospital to home, and an increase of follow up in the community where appropriate, facilitated through protected time for this and/or increasing staff resource.
- Develop parental support groups, and peer-to-peer support opportunities.
- Develop links with local services to be able to appropriately refer and signpost to these. Ringfenced time should be given to staff members to enable this.

Appendix 2.B: Parental survey

PARTICIPANT INFORMATION SHEET (Version/Date: V2.0 22/10/2021)

Understanding the psychological needs of parents of whose babies have received care on Neonatal Care Unit, and exploring the barriers to meeting these

PARTICIPANT INFORMATION SHEET (Version/Date: V2.0 22/10/2021)

My name is Eleanor Sweeney and I am a Trainee Clinical Psychologist at the University of Oxford, working with the Neonatal Psychology team at the (name of hospital removed). This is an invitation to take part in a service evaluation that the Neonatal Psychology Team are undertaking. This service evaluation will involve completing a short online survey.

Please take the time to read this Participant Information Sheet, and discuss it with others if you wish. If there is anything that is not clear, or if you would like more information, please contact the Neonatal Psychology Team on (email removed) who will do their best to answer your query. However, please note that they do not work at (name of hospital removed) every day, and so it may take up to 10 working days to respond to your enquiry.

What is the purpose of the service evaluation?
Having your baby receive care in the neonatal unit can be an incredibly stressful and challenging time for parents. We are looking to enhance our understanding of the most effective way to support parental emotional wellbeing during this time, and any barriers there may be to this. We hope that this will enable us to better tailor our service to the psychological needs of parents, and allow for more accessible, parent-led care.

Why have I been invited to take part?
You have been invited to take part because you have been identified as a parent whose baby was cared for on the neonatal care unit.

We would very much value the opportunity to hear from a range of parents, including those who did and did not receive any support for their emotional well-being. However, in order to participate we require that:

- You are over the age of 18
- Your baby(ies) stayed on the neonatal unit for more than 3 days
- Your baby(ies) is/are no longer being cared for on the neonatal unit
- Your baby(ies) were cared for on the neonatal unit within the past 6 months

In order to gain as many perspectives as possible, please feel free to share this survey with others who it may be applicable to.

Do I have to take part?
No, taking part is entirely voluntary. The evaluation is in the form of an online survey: you can stop completing the survey at any point. However, as the data collected is anonymous, you will be unable to withdraw your responses once you have submitted them.

What will happen to me if I decide to take part?
You will be asked to confirm that you have read this information sheet, and then to complete a short online survey, estimated to take 10-15 minutes. This will involve a combination of 'tick box' answers and written feedback. There are some demographic questions, followed by questions asking you about your experiences of any psychological or emotional support that you received when your baby, or babies, spent time on the neonatal unit. Psychological support can cover a broad range of things, including informal discussions with ward staff to regularly meeting with a member of the psychology team. You may have also not received any support.

Are there any disadvantages/risks from taking part?
Taking part will take approximately 10-15 minutes of your time. You will be asked to reflect upon support you received when your baby was on the neonatal unit and reflecting upon this time may be difficult. You are welcome to take a break from the survey and return to it later, or to stop the survey completely. There is also information on the bottom of this page about where you can seek support if you are finding things difficult. We have consulted with people with lived experience of having their baby cared for on the neonatal unit, and the surveys have been designed with their feedback in mind, in order to try and minimise the potential for distress.

What are the possible benefits of taking part?
Your answers will help us understand how to better support parents' emotional wellbeing whilst their baby is receiving care in the neonatal unit. Your feedback will contribute to the development of more effective, accessible and parent-led psychological care, which may include new initiatives and training within the service.

What happens with my information?
We will adhere to the (name of hospital removed) data management policy. Data will be password-protected, and access to the raw data restricted to the core project team. No other staff members on the neonatal unit will be reviewing the raw data. All identifiable information will be removed in the write-up. Demographic information will be destroyed at the end of the study. In accordance with the University of Oxford's and (name of hospital removed) Policy on the Management of Research Data & Records data will be stored for five years.

Relevant staff at (name of hospital removed) will have access to the survey responses. Responsible members of the University of Oxford may be given access to the data for monitoring and/or audit of the evaluation. We plan to report our findings in an academic journal and to present them to relevant charities and healthcare professionals at conferences. Any identifiable information will be removed before information is shared with other researchers or results are made public. This evaluation will contribute to Eleanor Sweeney's Doctorate in Clinical Psychology. If you would like to receive information on the findings, please email (email removed)

Who has reviewed this service evaluation?
This study has been reviewed by (name of hospital removed) Psychological Medicine

Governance Committee and the Clinical Trials and Research Governance team have confirmed this project to be a Service Evaluation.

What if there is a problem?
If you have a concern about any aspect of this study, please contact (email removed) who will do their best to answer your query. Please note that it may take up to 10 working days to respond to your enquiry. If you remain unhappy or wish to make a formal complaint, please contact PALS (Patient Advice and Liaison Service) via telephone on 01865 221473, or via email on (email removed).

Advice and support are available from the NHS if you are finding things difficult. There are also charities who can provide advice and support. If you are concerned about your mental health, we encourage you to speak to your General Practitioner (GP) who can then refer you for further specialist help if required. Please see below details of where you can access advice and support:

- GP
- NHS 111: To contact NHS 111 call "111". Available 24 hours a day, 7 days a week.
- The Samaritans: Call "116 123" to contact their helpline which is available 24 hours a day, 7 days a week. A range of support can also be found on their website www.samaritans.org
- BLISS Charity: A UK charity for babies born premature or sick. It supports families with a baby in neonatal care, website: https://www.bliss.org.uk email: hello@bliss.org.uk (they aim to respond within 3-5 working days)
- SSNAP: A Charity supporting the families of sick and premature babies treated in (location removed) to receive the best care, website: https://www.ssnap.org.uk, telephone: 01865 221359 email: (email removed) (office hours 10am – 3pm).

I'm Interested! What's Next?
Thank you so much for taking the time to read this information sheet! If you are happy to proceed, please click next to begin the survey.

Please be advised that the Neonatal Psychology Team email addresses are not always monitored and should not be used in the case of an emergency, if you are experiencing a crisis, please contact emergency services.

Consent to participate in service evaluation

1.

I confirm I am over the age of 18

2.

I confirm that my baby(ies) stayed on the neonatal unit for more than 3 days

3.

- [ ] I confirm that my baby(ies) is not currently on the neonatal unit

4.

- [ ] I confirm that my baby(ies) was cared for on the neonatal unit within the past 6 months

5.

- [ ] I confirm that I have read the participant information sheet (V2.0 22/10/2021) and I understand that by clicking this check box, I am consenting to take part in this service evaluation.

Demographic Details

6.Your date of birth: (please leave blank if prefer not to say)

7.What gender do you identify as:

- [ ] Woman
- [ ] Man
- [ ] Non-binary
- [ ] Prefer not to say
- [ ] Other

8.What best describes your sexual orientation? (please leave blank if prefer not to say)

9.Which option best describes your ethnicity?

- [ ] White
- [ ] Mixed/Multiple ethnic groups
- [ ] Asian/Asian British
- [ ] Black/African/Caribbean/Black British
- [ ] Arab
- [ ] Other ethnic group
- [ ] Prefer not to say

10.Which of the following best describes your current relationship status?

- [ ] Single
- [ ] In a relationship

- Married
- Separated
- Divorced
- Widowed
- Other
- Prefer not to say

11.Which of the following best describes your current employment status?

- Employed full time
- Employed part time
- Self-employed
- Student
- Not employed
- Maternity/Paternity Leave
- Retired
- Other
- Prefer not to say

12.Referring only to your recent experience of the neonatal unit, did you have more than one baby (e.g. twins/triplets) on the neonatal unit?

- No (during my baby's recent neonatal stay, I had one baby as a patient on the neonatal unit)
- Yes (during my babies' recent neonatal stay, I had more than one baby as a patient on the neonatal unit)
- Prefer not to say

13.Length of baby's (or babies') stay on the neonatal unit (days or weeks)?

14.How long ago was your baby discharged home from the neonatal unit (days or weeks)?

15.Which unit/s was your baby(ies) on (select all that apply)?

- Neonatal intensive care unit (NICU)

- [ ] High Dependency unit (HDU)
- [ ] Low Dependency Unit (LDU)
- [ ] Prefer not to say

Main Survey Questions

The following questions will ask you about the time when your baby (or babies) was being cared for on the neonatal unit. We are particularly interested in your experiences of any psychological or emotional support that you received from staff on the unit.

Psychological support can cover a broad range of things, including informal discussions with ward staff, to regularly meeting with a member of the psychology team.

In this survey, we would like you reflect on all of the different types of psychological support you may have received while your baby (or babies) was on the unit.

16.What psychological support for parents, if any, were you aware of during your baby's (or babies') time on the neonatal unit? (tick all that apply):

- [ ] Formal sessions with a psychologist / psychiatrist
- [ ] Informal support from SSNAP or members of the psychology team
- [ ] That I could seek support from any member of staff on the unit if I felt worried
- [ ] N/A - I was not aware of any psychological support for parents
- [ ]

17.If you were aware of this parental psychological support how did you find out about it? (tick all that apply)

- [ ] Other parents on the ward
- [ ] Nurses
- [ ] Nursery Nurses
- [ ] Doctors / Consultants
- [ ] Psychology Team (Clinical Psychologists, Assistant Psychologists)
- [ ] SSNAP Family Support Worker
- [ ] Chaplaincy volunteer
- [ ] Members of the Infant Feeding Team

- [ ] Speech and Language Therapist
- [ ] Physiotherapist / Occupational Therapist
- [ ] Posters placed around the unit
- [ ] N/A - I was not aware of any psychological support for parents
- [ ]

18.Is there anything that would have made it easier to find out about the support available for parents?

19.What, if any, support did you receive for your psychological needs? (tick all that apply)

- [ ] Discussions with other members of the neonatal staff team (not psychology team)
- [ ] General discussions with SSNAP Family Support Workers
- [ ] General discussions with the psychology team
- [ ] Formal psychology sessions
- [ ] N/A - I did not receive any psychological support
- [ ]

20.Who did you receive this support from? (tick all that apply)

- [ ] Other parents on the ward
- [ ] Nurses
- [ ] Health care assistants
- [ ] Doctors
- [ ] Psychology Team (Clinical Psychologists, Assistant Psychologists)
- [ ] SSNAP Family Support Worker
- [ ] Chaplaincy volunteer
- [ ] Members of the Infant Feeding Team
- [ ] Speech and Language Therapist
- [ ] Physiotherapist / Occupational Therapist

☐ N/A - I was not aware of any psychological support for parents

☐

21.What type of support, and from who, did you find most helpful overall? (Please write N/A if you did not receive any psychological support)

22.What aspects of the support you received did you find most helpful? (Please write N/A if you did not receive any psychological support)

23.What aspects of the support you received did you find unhelpful? (Please write N/A if you did not receive any psychological support)

24.What sort of support would you have liked to receive as parents (either instead of or as well as any support you did receive)?

25.What do you feel are the barriers to parents accessing psychological support on the neonatal unit from your experience?

26.What would have made it easier to access support in the form of more general discussions with the wider team?

27.What would have made it easier to access informal support from the psychology team or SSNAP, or the chaplains?

28.What would have made it easier to access formal psychological sessions?

29.Do you have any other comments or suggestions for improving the psychological support for parents on the neonatal unit?

Thank you and Debrief

Thank you so much for taking the time to complete this survey. Your input will be used to contribute to ensuring the highest quality of psychological support for the parents of babies

on neonatal units.

Advice and Support:
Advice and support are available from the NHS if you are finding things difficult. There are also charities who can provide advice and support. If you are concerned about your mental health, we encourage you to speak to your General Practitioner (GP) who can then refer you for further specialist help.

Please see below details of where you can access advice and support:

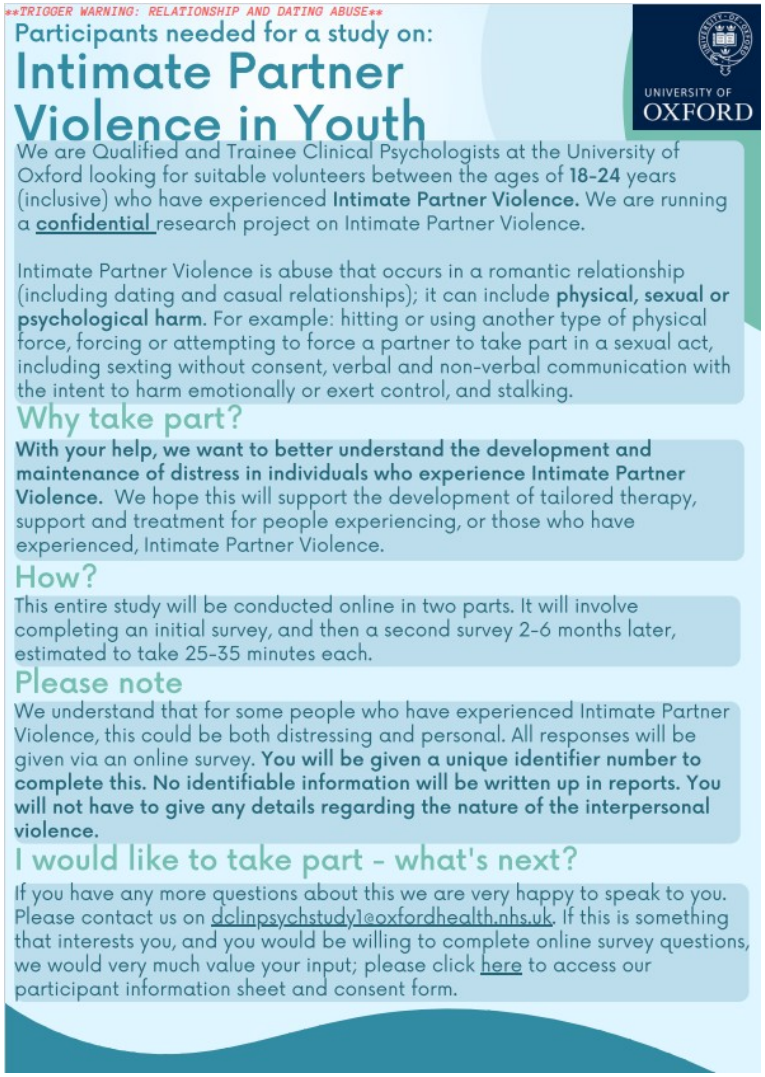
- GP
- NHS 111: To contact NHS 111 call "111". Available 24 hours a day, 7 days a week.
- The Samaritans: Call "116 123" to contact their helpline which is available 24 hours a day, 7 days a week. A range of support can also be found on their website www.samaritans.org
- BLISS Charity: A UK charity for babies born premature or sick. It supports families with a baby in neonatal care, website: https://www.bliss.org.uk email: hello@bliss.org.uk (they aim to respond within 3-5 working days)
- SSNAP: A Charity supporting the families of sick and premature babies treated in (location removed) to receive the best care, website: https://www.ssnap.org.uk, telephone: 01865 221359 email: (email removed) (office hours 10am – 3pm).

If you have any more questions about any aspect of this survey, please get in touch with the Neonatal Psychology Team on (email removed) who will do their best to answer your query. However, please note that we do not work at (name of hospital removed) every day, and so it may take up to 10 working days to respond to your enquiry.

Please be advised that the Neonatal Psychology Team email addresses are not always monitored and should not be used in the case of an emergency, if you are experiencing a crisis, please contact emergency services.

Appendix 3.A: Study recruitment posters





TRIGGER WARNING: RELATIONSHIP AND DATING ABUSE

Participants needed for a study on:

Intimate Partner Violence in Youth

UNIVERSITY OF OXFORD

We are Qualified and Trainee Clinical Psychologists at the University of Oxford looking for suitable volunteers between the ages of **18-24** years (inclusive) who have experienced **Intimate Partner Violence.** We are running a **confidential** research project on Intimate Partner Violence.

Intimate Partner Violence is abuse that occurs in a romantic relationship (including dating and casual relationships); it can include **physical, sexual or psychological harm.** For example: hitting or using another type of physical force, forcing or attempting to force a partner to take part in a sexual act, including sexting without consent, verbal and non-verbal communication with the intent to harm emotionally or exert control, and stalking.

Why take part?

With your help, we want to better understand the development and maintenance of distress in individuals who experience Intimate Partner Violence. We hope this will support the development of tailored therapy, support and treatment for people experiencing, or those who have experienced, Intimate Partner Violence.

How?

This entire study will be conducted online in two parts. It will involve completing an initial survey, and then a second survey 2-6 months later, estimated to take 25-35 minutes each.

Please note

We understand that for some people who have experienced Intimate Partner Violence, this could be both distressing and personal. All responses will be given via an online survey. **You will be given a unique identifier number to complete this. No identifiable information will be written up in reports. You will not have to give any details regarding the nature of the interpersonal violence.**

I would like to take part - what's next?

If you have any more questions about this we are very happy to speak to you. Please contact us on dclinpsychstudy1@oxfordhealth.nhs.uk. If this is something that interests you, and you would be willing to complete online survey questions, we would very much value your input; please click here to access our participant information sheet and consent form.

Appendix 3.B: Participant information sheet and consent form (general)

Participant Information & Consent

Start of Block: Participant Information

Oxford Institute of Clinical Psychology Training and Research
Research Team Email:

PARTICIPANT INFORMATION SHEET (Version 1.2, 29/02/2022)

Understanding the impact of Intimate Partner Violence in Youth

We are a group of Clinical and Trainee Psychologists, at the University of Oxford, and this is an invitation to take part in our research study.

Before you decide, it is important that you understand why the research is being done and what it would involve for you. Please take some time to read this Participant Information Sheet, and discuss it with others if you wish. If there is anything that is not clear, or if you would like more information, please ask us by emailing the research team at (will add research email)

What is the purpose of the study?

Intimate Partner Violence is abuse that occurs in a romantic relationship (including casual and dating), including physical, sexual or psychological harm.

This can include, but is not limited to:

- **Physical aggression**, such as hurting or trying to hurt a partner, e.g. hitting, kicking or using another type of physical force.
- **Sexual coercion or violence**, such as forcing or attempting to force a partner to take part in a sexual act, including sexting without consent.
- **Psychological abuse** such as verbal and non-verbal communication with the intent to harm emotionally or exert control.
- **Stalking**, such as repeated, unwanted attention and contact by a partner that causes fear or concern for one's own safety or the safety of someone close to them.

With your help, we are wanting to better understand the development and maintenance of distress in individuals who experience Intimate Partner Violence. We hope this will support the development of tailored therapy, support and treatment for people experiencing or those who have experienced Intimate Partner Violence.

In particular we are investigating symptoms of post-traumatic stress, and shame associated with Intimate Partner Violence.

Your views and experience would be greatly valued in helping us to better understand this area. We hope this will help us to help us other people who have experienced Intimate Partner Violence. It is hoped that this will result in a reduction of distress amongst young people aged 18-24 years who have experienced Intimate Partner Violence.

Who would we like to hear from?

We are happy to hear from a full range of people who have been the recipient of any kind of Intimate Partner Violence.

However, in order to participate we require that:

- You are aged 18–24 years inclusive
- You are not currently in a relationship where there has been any past, or current Intimate Partner Violence
- It is a minimum of 10 weeks since you last experienced any form of Intimate Partner Violence
- Intimate Partner Violence occurred after the age of 16
- You have access to the internet, as the questionnaires will be completed online
- You currently live in the UK
- You are able to read English

Do I have to take part?

No, taking part is completely voluntary. You have the right to withdraw from the project at any point during the study without giving a reason by email to the research team on *(will insert email here)*. However, once the study has been completed, you will be unable to withdraw your data. If you have any questions before taking part please contact the research team on *(will add research email here)*, we will aim to respond to your enquiry within 10 working days.

What will happen to me if I decide to take part?

This entire study will be conducted online in two parts (Part-1 and Part-2). This will involve completing an initial survey, and then a (shorter) second survey, between 2 and 6 months later. Both surveys are estimated to take between 10-20 minutes to complete.

Part-1: Upon completing the consent form, you will be emailed a link to the online questionnaires. You will answer some demographic questions, and some questions relating to symptoms of post-traumatic stress, low mood and anxiety. These are mainly tick-box questions and they are completed online. **You will not have to give any details regarding the nature of the interpersonal violence.**

Part-2: This will be 2-6 months post Part-1. You will be emailed a link from the research email, requesting completion of the second set of questionnaires. These will be questions related to symptoms of post-traumatic stress, low mood and anxiety. These are all tick-box questions and they are completed online.

We may email you updates on the study between Part-1 and Part-2 to let you know how recruitment for the study is going and to help engagement.

Will my responses be confidential?

Confidentiality is of utmost priority. We understand that for some people who have experienced Intimate Partner Violence, this could be both distressing and personal. You will be given a unique identifier number to complete the surveys.

Confidentiality would be breached only in the very rare circumstance that it was judged that you or someone else was at immediate risk of serious harm. In these circumstances only information necessary to ensure immediate safety would be released.

No identifiable information will be written up in reports.

Are there any disadvantages/risks from taking part?

Taking part will take approximately one hour of your time. Asking you to think about your experience of Intimate Partner Violence may be difficult, and it is possible you might find answering some of the questions upsetting. You are welcome to take a break from the survey and return to it later, or to stop the survey completely. We have consulted with people with lived experience of intimate partner violence and the surveys have been designed with their feedback in mind, in order to try and minimise the potential for distress.

At the end of completion of the both the surveys at Part-1 and Part-2, you will provided with contact details of services and third-party organisations that will be able to offer support and guidance if you experience or are experiencing distress.

Ethical Approval

This study has been reviewed, and approved, by a subcommittee of the University of Oxford Central University Research Ethics Committee (reference: R78205/RE001).

What happens with my information?

Email addresses will be stored in password protected files on the researcher's Oxford University OneDrive. Personal data will be stored for up to 3 months after the study has concluded and then be permanently deleted.

Research data (including consent forms and the questionnaire data that you fill in using a unique participant identifier) will be stored for at least 3 years after publication or public release of the work of the research. This information will then be permanently deleted and destroyed.

The researchers involved in this study will have access to the research data. Responsible members of the University of Oxford may be given access to the data for monitoring and and/ or audit of the research. All personal information that could identify you will be removed or

changed before information is shared with other researchers or results are made public. Using the research data, we hope to report our findings in academic journals and present them to relevant charities, and to health professionals at conferences. The findings will also contribute to a student's Doctorate in Clinical Psychology. You will not be identified in any reports or publications arising from the study.

Data Protection

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study. The University will process your personal data for the purpose of the research outlined above. Research is a task that is performed in the public interest. Further information about your rights with respect to your personal data is available from http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/individualrights/.

What if there is a problem?

If you have a concern about any aspect of this study, please contact *(will insert research study email)* and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Medical Sciences Interdivisional Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible:

Email: ethics@medsci.ox.ac.uk; Address: Research Services, University of Oxford, Boundary Brook House, Churchill drive, Headington, OX3 7GB.

Advice and Support:

Advice and support are available from the NHS if you are finding things difficult. There are also charities who can provide advice and support. If you are concerned about your mental health, we encourage you to speak to your General Practitioner (GP)/Family Doctor who can then refer you for further specialist help if required.

Please see below details of where you can access advice and support:

- GP/Family Doctor
- NHS 111: To contact NHS 111 call "111". Available 24 hours a day, 7 days a week
- Call 999 if it's an emergency or you're in immediate danger
- The Samaritans: Call "116 123" to contact their helpline which is available 24 hours a day, 7 days a week. A range of support can also be found on their website www.samaritans.org

There are also specialist organisations that can offer you support:

- Freephone National Domestic Abuse Helpline, run by Refuge, telephone: 0808 200 0247 (24 hours, 7 days a week), Website: www.nationaldahelpline.org.uk

- Galop (for lesbian, gay, bisexual and transgender people), telephone: 08009995428 (Monday to Friday 10am – 5pm, Wednesday and Thursday 10am – 8:00pm), website: www.galop.org.uk Live Fear Free helpline (Wales), telephone: 08088010800 (24 hours, 7 days a week),website: www.livefearfree.gov.wales
- Men's Advice Line, telephone: 0808 801 0327 (Monday–Friday 9am-8pm), website: www.mensadviceline.org.uk
- Rape Crisis (England and Wales), telephone: 08088029999 (12pm-2:30pm and 7pm-9:30pm, 7 days a week), website: www.rapecrisis.org.uk
- Respect phoneline, telephone: 08088024040 (Monday–Friday 9am-8pm), website: www.respectphoneline.org.uk
- Scotland's Domestic Abuse and Forced Marriage Helpline, telephone: 08000271234 (24 hours, 7 days a week), website: sdafmh.org.uk
- Scottish Women's Aid, telephone: 01312266606 (24 hours, 7 days a week), website: www.scottishwomensaid.org.uk

- Women's Aid Federation (Northern Ireland), telephone: 08009171414 (24 hours, 7 days a week), website: www.womensaidni.org

- Say It Loud, a UK based organisation that provides emotional support for individuals who have been victim to sexual violence, sexual assault and/or harassment. Their chat line usually available via their Instagram, from Monday-Friday, 5-8pm. Their emailing service is usually open from Monday-Friday, 9-5pm. However, these times are subject to change and periods of closure, so please check first. They provide a signposting service and support in helping individuals to make informed decisions within their sexual trauma recovery website: www.sayitloudspace.com, email: contact@sayitloudspace.com, Instagram: www.instagram.com/sayitloudspace

Reporting abuse:

Many kinds of Intimate Partner Violence are criminal offences and we strongly encourage you to report these to the police. Most police stations have Domestic Violence Units or Community Safety Units with specially trained officers to deal with domestic violence and abuse, and to help and protect you. Find your nearest police station here at www.police.uk.

I'm Interested! What's Next?

If you would like to participate, please click next to complete the consent form. You will be then sent a link to complete the survey.

End of Block: Participant Information

Start of Block: Consent Form

Oxford Institute of Clinical Psychology Training and Research
Research Team Email: *(will insert this here)*

ONLINE PARTICIPANT CONSENT FORM

Approval Reference: R78205/RE001

Understanding the impact of Intimate Partner Violence in Youth

I have read and understood the information sheet version 1.2 dated 29/02/2022 for the above study. I have had the opportunity to consider the information and ask any questions I would like to.

- I am within the age of 18-24
- I confirm that I was the recipient of Intimate Partner Violence after the age of 16
- I am not currently in a romantic relationship where there has previously been, or is currently, any Intimate Partner Violence
- It has been over 10 weeks since my last experience of Intimate Partner Violence
- I live in the UK
- I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without penalty
- I understand that research data collected during the study may be looked at by designated individuals from the University of Oxford where it is relevant to my taking part in this study. I give permission for these individuals to have access to this data
- I understand who will have access to my personal data, how the data will be stored, and what will happen to the data at the end of the project
- I understand that all information will be kept strictly confidential except in rare circumstances in which it is judged that I am, or someone else is, at immediate risk of serious harm, or where information is requested by a court of law
- I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee
- I understand how to raise a concern or make a complaint
- The email address I will give will be my own, and I agree to be sent details and updates on the above titled study to this email address.

I understand that by checking the below box, I am confirming all of the above statements are true, and I consent to take part in this study:

- o
-

- My email address is:

_____

Appendix 3.C: Participant information sheet and consent form (Prolific)

Start of Block: Participant Information & Consent

Oxford Institute of Clinical Psychology Training and Research
Research Team Email: (email removed)

PARTICIPANT INFORMATION SHEET
(version 1, 29/03/2022)

Understanding the impact of Intimate Partner Violence in Youth
We are a group of Clinical and Trainee Psychologists, at the University of Oxford, and this is an invitation to take part in our research study.

Before you decide, it is important that you understand why the research is being done and what it would involve for you. Please take some time to read this Participant Information Sheet, and discuss it with others if you wish. If there is anything that is not clear, or if you would like more information, please ask us by emailing the research team at (email removed).

What is the purpose of the study?

Intimate Partner Violence is abuse that occurs in a romantic relationship (including casual and dating), including physical, sexual or psychological harm.

This can include, but is not limited to:

- **Physical aggression**, such as hurting or trying to hurt a partner, e.g. hitting, kicking or using another type of physical force.
- **Sexual coercion or violence**, such as forcing or attempting to force a partner to take part in a sexual act, including sexting without consent.
- **Psychological abuse** such as verbal and non-verbal communication with the intent to harm emotionally or exert control.
- **Stalking**, such as repeated, unwanted attention and contact by a partner that causes fear or concern for one's own safety or the safety of someone close to them.

With your help, we are wanting to better understand the development and maintenance of distress in individuals who experience Intimate Partner Violence. We hope this will support the development of tailored therapy, support and treatment for people experiencing or those who have experienced Intimate Partner Violence.

In particular we are investigating symptoms of post-traumatic stress, and shame associated with Intimate Partner Violence.

Your views and experience would be greatly valued in helping us to better understand this area. We hope this will help us to help other people who have experienced Intimate Partner Violence. It is hoped that this will result in a reduction of distress amongst young people aged 18-24 years who have experienced Intimate Partner Violence.

Who would we like to hear from?

We are happy to hear from a full range of people who have been the recipient of any kind of Intimate Partner Violence.

However, in order to participate we require that:

- You are aged 18–24 years inclusive
- You are not currently in a relationship where there has been any past, or current Intimate Partner Violence
- It is a minimum of 10 weeks since you last experienced any form of Intimate Partner Violence
- Intimate Partner Violence occurred after the age of 16
- You have access to the internet, as the questionnaires will be completed online
- You currently live in the UK
- You are able to read English

Do I have to take part?

No, taking part is completely voluntary. You have the right to withdraw from the project at any point during the study without giving a reason by email to the research team on (email removed). However, once the study has been completed, you will be unable to withdraw your data. If you have any questions before taking part please contact the research team on (email removed), we will aim to respond to your enquiry within 10 working days.

What will happen to me if I decide to take part?

This entire study will be conducted online in two parts (Part-1 and Part-2). This will involve completing an initial survey, and then a (shorter) second survey, between 2 and 6 months later. Both surveys are estimated to take between 10-20 minutes to complete.

Part-1: Upon completing the consent form, you will be directed to the online questionnaires. You will answer some demographic questions, and some questions relating to symptoms of post-traumatic stress, low mood and anxiety. These are mainly tick-box questions and they are completed online. **You will not have to give any details regarding the nature of the interpersonal violence.**

Part-2: This will be 2-6 months post Part-1. You will be invited to complete part-2 via Prolific. These will be questions related to symptoms of post-traumatic stress, low mood and anxiety. These are all tick-box questions and they are completed online.

Will my responses be confidential?

Confidentiality is of utmost priority. We understand that for some people who have experienced Intimate Partner Violence, this could be both distressing and personal. You will use your Prolific unique identifier number to complete the surveys.

Confidentiality would be breached only in the very rare circumstance that it was judged that you or someone else was at immediate risk of serious harm. In these circumstances only information necessary to ensure immediate safety would be released.

No identifiable information will be written up in reports.

Are there any disadvantages/risks from taking part?

Taking part will take approximately one hour of your time. Asking you to think about your experience of Intimate Partner Violence may be difficult, and it is possible you might find answering some of the questions upsetting. You are welcome to take a break from the survey and return to it later, or to stop the survey completely. We have consulted with people with lived experience of Intimate Partner Violence and the surveys have been designed with their feedback in mind, in order to try and minimise the potential for distress.

At the end of completion of the both the surveys at Part-1 and Part-2, you will provided with contact details of services and third-party organisations that will be able to offer support and guidance if you experience or are experiencing distress.

Ethical Approval

This study has been reviewed, and approved, by a subcommittee of the University of Oxford Central University Research Ethics Committee (Reference: R78205/RE001).

What happens with my information?

Research data (including consent forms and the questionnaire data that you fill in using your Prolific unique participant identifier) will be stored for at least 3 years after publication or public release of the work of the research. This information will then be permanently deleted and destroyed.

The researchers involved in this study will have access to the research data. Responsible members of the University of Oxford may be given access to the data for monitoring and and/ or audit of the research. All personal information that could identify you will be removed or changed before information is shared with other researchers or results are made public. Using the research data, we hope to report our findings in academic journals and present them to relevant charities, and to health professionals at conferences. The findings will also contribute to a student's Doctorate in Clinical Psychology. You will not be identified in any reports or publications arising from the study.

Data Protection

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study. The University will process your personal data for the purpose of the research outlined above. Research is a task that is

performed in the public interest. Further information about your rights with respect to your personal data is available
from http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/individualrights/.

What if there is a problem?

If you have a concern about any aspect of this study, please contact (email removed) and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Medical Sciences Interdivisional Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible: Email: ethics@medsci.ox.ac.uk; Address: Research Services, University of Oxford, Boundary Brook House, Churchill drive, Headington, OX3 7GB.

Advice and Support:

Advice and support are available from the NHS if you are finding things difficult. There are also charities who can provide advice and support. If you are concerned about your mental health, we encourage you to speak to your General Practitioner (GP)/Family Doctor who can then refer you for further specialist help if required.

Please see below details of where you can access advice and support:

- GP/Family Doctor
- NHS 111: To contact NHS 111 call "111". Available 24 hours a day, 7 days a week
- Call 999 if it's an emergency or you're in immediate danger
- The Samaritans: Call "116 123" to contact their helpline which is available 24 hours a day, 7 days a week. A range of support can also be found on their website www.samaritans.org

There are also specialist organisations that can offer you support:

- Freephone National Domestic Abuse Helpline, run by Refuge, telephone: 0808 200 0247 (24 hours, 7 days a week), Website: www.nationaldahelpline.org.uk
- Galop (for lesbian, gay, bisexual and transgender people), telephone: 08009995428 (Monday to Friday 10am – 5pm, Wednesday and Thursday 10am – 8:00pm), website: www.galop.org.uk Live Fear Free helpline (Wales), telephone: 08088010800 (24 hours, 7 days a week),website: www.livefearfree.gov.wales
- Men's Advice Line, telephone: 0808 801 0327 (Monday–Friday 9am-8pm), website: www.mensadviceline.org.uk
- Rape Crisis (England and Wales), telephone: 08088029999 (12pm-2:30pm and 7pm-9:30pm, 7 days a week), website: www.rapecrisis.org.uk
- Respect phoneline, telephone: 08088024040 (Monday–Friday 9am-8pm), website: www.respectphoneline.org.uk
- Scotland's Domestic Abuse and Forced Marriage Helpline, telephone: 08000271234 (24 hours, 7 days a week), website: sdafmh.org.uk
- Scottish Women's Aid, telephone: 01312266606 (24 hours, 7 days a week), website: www.scottishwomensaid.org.uk

- Women's Aid Federation (Northern Ireland), telephone: 08009171414 (24 hours, 7 days a week), website: www.womensaidni.org
- Say It Loud, a UK based organisation that provides emotional support for individuals who have been victim to sexual violence, sexual assault and/or harassment. Their chat line usually available via their Instagram, from Monday-Friday, 5-8pm. Their emailing service is usually open from Monday-Friday, 9-5pm. However, these times are subject to change and periods of closure, so please check first. They provide a signposting service and support in helping individuals to make informed decisions within their sexual trauma recovery website: www.sayitloudspace.com, email: contact@sayitloudspace.com, Instagram: www.instagram.com/sayitloudspace

Reporting abuse:

Many kinds of Intimate Partner Violence are criminal offences and we strongly encourage you to report these to the police. Most police stations have Domestic Violence Units or Community Safety Units with specially trained officers to deal with domestic violence and abuse, and to help and protect you. Find your nearest police station here at www.police.uk.

I'm Interested! What's Next?

If you would like to participate, please click next to complete the consent form. You will be then sent a link to complete the survey.

ONLINE PARTICIPANT CONSENT FORM

Ethics Approval Reference: R78205/RE001

Understanding the impact of Intimate Partner Violence in Youth

Please enter your Prolific ID number:

_____

I have read and understood the information sheet version 1 dated 29/03/2022 for the above study. I have had the opportunity to consider the information and ask any questions I would like to.

- I am within the age of 18-24
- I confirm that I was the recipient of Intimate Partner Violence after the age of 16
- I am not currently in a romantic relationship where there has previously been, or is currently, any Intimate Partner Violence
- It has been over 10 weeks since my last experience of Intimate Partner Violence I live in the UK
- I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without penalty

- I understand that research data collected during the study may be looked at by designated individuals from the University of Oxford where it is relevant to my taking part in this study. I give permission for these individuals to have access to this data I understand who will have access to my personal data, how the data will be stored, and what will happen to the data at the end of the project
- I understand that all information will be kept strictly confidential except in rare circumstances in which it is judged that I am, or someone else is, at immediate risk of serious harm, or where information is requested by a court of law
- I understand that after the completion of Part-1, I will be invited via Prolific to complete Part-2
- I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee
- I understand how to raise a concern or make a complaint

I understand that by checking the below box, I am confirming all of the above statements are true, and I consent to take part in this study:

o

Appendix 3.D: Participant questionnaires

Please see the following links to view the participant questionnaires in the research:

Outcome Measure	Questionnaire Name	Link to Questionnaires
Negative appraisals	The Post Traumatic Appraisals Inventory (Foa, Ehlers, Clark, Tolin & Orsillo 1999).	https://oxcadatresources.com/questionnaires-ptsd/
Disjointed Memories	The Trauma Memory Questionnaire, developed by Halligan, Michael, Clark and Ehlers (2003): only the subscale assessing disjointed memories was used (questions 5-8).	https://oxcadatresources.com/questionnaires-ptsd/
Unhelpful coping strategy: safety behaviours	Safety Behaviour Questionnaire (full scale) from OXCADAT, adapted from Dunmore, Clark and Ehlers (1999; 2001).	https://oxcadatresources.com/questionnaires-ptsd/
Unhelpful coping strategy: persistent dissociation	Trait-State Dissociation Scale from OXCADAT adapted from Murray, Ehlers and Mayou (2002).	https://oxcadatresources.com/questionnaires-ptsd/
Unhelpful coping strategy: responses to intrusions	The Response to Intrusions Questionnaire from	https://oxcadatresources.com/

	OXCADAT adapted from Clohessy and Ehlers (1999) and Murray, Ehlers and Mayou (2002).	questionnaires-ptsd/
Trauma-related shame	Trauma-Related Shame Inventory (Øktedalen et al., 2014).	https://link.springer.com/article/10.1007/s10862-014-9422-5
PTSD symptom severity[2]	The Post-Traumatic Stress Disorder Checklist (PCL-5; Weathers, Litz, Keane, Palmieri, Marx & Schnurr, 2013).	https://www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form_week.PDF
Anxiety and Depression	The Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983).	https://pubmed.ncbi.nlm.nih.gov/6880820/

Appendix 3.E: Ethics approval form

DocuSign Envelope ID: 95747048-988F-4A9F-916A-52FF6AAF4C87

MEDICAL SCIENCES INTERDIVISIONAL RESEARCH ETHICS COMMITTEE
Research Services, Boundary Brook House, Churchill Drive, Headington, Oxford, OX3 7GB
Tel: +44(0)1865 616575
ethics@medsci.ox.ac.uk

CONFIDENTIAL

Dr Myra Cooper & Eleanor Sweeney
Oxford Institute for Clinical Psychology Training (OxICPT)
Isis Education Centre
Warneford Hospital
Oxford

11 January 2022

Dear Dr Cooper and Eleanor,

Research Ethics Approval - CUREC 1

Ethics Approval Reference: R78205/RE001

Study title: Does the Cognitive Model predict PTSD symptom severity, and how is this related to shame, in youth who have experienced Intimate Partner Violence?

Short title: Understanding the impact of Intimate Partner Violence in Youth

The above application has been considered on behalf of the Medical Sciences Interdivisional Research Ethics Committee (MS IDREC) in accordance with the University's procedures for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to the IDREC, the proposed research has been judged as meeting appropriate ethical standards, and approval has been granted for a period of **18 months**, commencing on **11th January 2022.**

Amendments

Should there be any subsequent changes to the study, you should submit details to the MS IDREC for consideration and approval. Details of changes must be listed on an amendment form.

Yours Sincerely

DocuSigned by:
Leah Butts
9F14888D2BC549A...

Mrs Leah Butts
Research Ethics Administrator

for
Dr Helen Barnby-Porritt
Research Ethics Manager

Appendix 3F: Paper highlights

The proposed journal specifies that ‘highlights are mandatory’. These consist of three to five bullet points (maximum 85 characters, including spaces, per bullet point). The following highlights are proposed for the current paper:

- Investigated whether the Cognitive-Model predicts PTSD in youth IPV survivors
- Investigated the impact of trauma-related shame
- When controlling for covariates, only safety behaviours predicted PTSD symptoms
- When controlling for covariates, shame did not predict PTSD symptoms
- Shame did not moderate the link between the Cognitive-Model and PTSD symptoms