

## Central Lancashire Online Knowledge (CLOK)

Title	The 'toxic trio' (domestic violence, substance misuse and mental ill-health): How good is the evidence base?
Type	Article
URL	<a href="https://clock.uclan.ac.uk/36806/">https://clock.uclan.ac.uk/36806/</a>
DOI	<a href="https://doi.org/10.1016/j.chidyouth.2020.105678">https://doi.org/10.1016/j.chidyouth.2020.105678</a>
Date	2021
Citation	Skinner, Guy C.M., Bywaters, Paul W.B., Bilson, Andrew, Duschinsky, Robbie, Clements, Keith and Hutchinson, Dustin (2021) The 'toxic trio' (domestic violence, substance misuse and mental ill-health): How good is the evidence base? Children and Youth Services Review, 120 (105678). ISSN 0190-7409
Creators	Skinner, Guy C.M., Bywaters, Paul W.B., Bilson, Andrew, Duschinsky, Robbie, Clements, Keith and Hutchinson, Dustin

It is advisable to refer to the publisher's version if you intend to cite from the work.  
<https://doi.org/10.1016/j.chidyouth.2020.105678>

For information about Research at UCLan please go to <http://www.uclan.ac.uk/research/>

All outputs in CLOK are protected by Intellectual Property Rights law, including Copyright law. Copyright, IPR and Moral Rights for the works on this site are retained by the individual authors and/or other copyright owners. Terms and conditions for use of this material are defined in the <http://clock.uclan.ac.uk/policies/>

**The ‘Toxic Trio’ (domestic violence, substance misuse and mental ill-health): how good is the evidence base?**

Authors: Guy C. M. Skinner<sup>a</sup>, Paul W. B. Bywaters<sup>b</sup>, Andy Bilson<sup>c</sup>, Robbie Duschinsky<sup>d</sup>, Keith Clements<sup>e</sup>, Dustin Hutchinson<sup>e</sup>.

Affiliations:

- a. Institute of Criminology, University of Cambridge, Sidgwick Avenue, Cambridge, CB3 9DA, UK.
- b. Centre for Applied Childhood, Youth and Family Research, University of Huddersfield, Huddersfield, HD1 3DH, UK.
- c. Centre for Children and Young People’s Participation, School of Social Work, University of Central Lancashire, Preston, PR1 2HE, UK.
- d. Applied Social Science Group, Primary Care Unit, University of Cambridge, Forvie Site, Cambridge Biomedical Campus, Cambridge, CB2 0SR
- e. National Children’s Bureau, 23 Mentmore Terrace, Hackney, London, E8 3PN, UK.

Corresponding Author: Paul W. B. Bywaters, P.Bywaters@hud.ac.uk.

**The ‘Toxic Trio’ (domestic violence, substance misuse and mental ill-health): how good is the evidence base?**

**Abstract**

The term ‘toxic trio’ was coined to describe the risk of child abuse and neglect stemming from a combination of domestic violence, parental mental health issues and/or learning disability, and parental alcohol and/or drug misuse (Brandon, 2009). Although concerns about the language have been raised in some quarters, it has become a dominant reference point in children’s social care in England and, to an extent, internationally over the past two decades. It has become embedded in the family justice system, child protection assessment processes and national data collection. There is evidence that each factor in isolation can lead to worse child outcomes, although this is of mixed quality and far from comprehensive. This article reports the results of a systematic review of evidence relevant to the relationship between the ‘toxic trio’ factors in combination and child maltreatment, identifying 20 papers. Despite the term’s currency, we found little quality evidence of the incidence of the ‘trio’ factors in child maltreatment, little consideration of intersectionality and almost no theoretical examination of the supposed relationships. Such studies as have been conducted have too rarely taken into account, or controlled for, contextual factors, such as the socioeconomic circumstances or the ethnicity of the families, or children’s ages. The discrepancy between the priority given to the ‘toxic trio’ and the paucity of the evidence-base makes a case for a shift away from over-simplified attributions of parental risk in policy and practice, and towards greater attention being given to other significant factors for child protection.

**Keywords (6)** – Toxic Trio, Child Maltreatment, Mental Illness, Substance Misuse, Domestic Violence, Learning Disability.

**The 'Toxic Trio' (domestic violence, substance misuse and mental ill-health): how good is the evidence base?**

**Introduction**

During the last twenty years, the idea of a 'toxic trio', or 'triad' (Fuller-Thomson et al., 2019) has become deeply embedded in child protection policy and practice, especially perhaps in England. The first five items in the list of factors to be recorded in child in need assessments in England are drug misuse, alcohol misuse, domestic violence, mental health and learning disability (Department for Education, 2018, p. 39-40). The Children's Commissioner's Office (2019) expressed concerns about these factors and estimated that almost 400,000 children in England were living in a household where substance misuse, domestic violence or moderate to severe mental illness had ever been reported and almost 100,000 where these three factors were current or recent. The Department for Education (DfE) recorded that in the year to April 2019, 50% of children in need assessments reported the presence of domestic violence, 43% parental mental ill-health, around 20% alcohol misuse and just under 20% drug misuse (DfE, 2019).

However, recent disquiet about the language led the Association of Directors of Children's Services to re-phrase it as the 'trigger trio' (ADCS, 2018: 23). The parents we consulted (see below) viewed the term as offensive and alienating. It was coined to describe the view that children are at particular risk of significant harm at home where certain factors are present: parent or caregiver mental illness and/or learning disability; parental drug and/or alcohol misuse; and domestic violence. The characterisation of these five factors as a 'trio' has depended upon reducing mental illness and learning disability to a single category, generally to the neglect of the latter, and similarly treating alcohol and drug misuse as if they were one and the same.

There is a long history of research documenting that domestic violence, substance misuse and parental mental health or learning disability issues are, individually, statistically associated with poorer childhood outcomes. However effect sizes have been relatively small, and the individual contribution of the different factors is a different matter to the claim of ‘toxic trio’ discourse that the interaction between the factors is the basis for substantial additional child risk. In this article, we begin by tracing the emergence of the idea of the ‘toxic trio’ and its subsequent assimilation into practice and data collection processes, before identifying and reviewing the evidence-base relevant to the claim that children are at particular risk of child abuse and neglect where domestic violence, parental mental health issues and/or learning disability, and parental alcohol and/or drug misuse are co-present.

### **Historical background to the ‘toxic trio’**

In England, a key milestone in the work identifying parental risk factors for child abuse and neglect was the Department of Health’s (1995) programme of research studies carried out in the early 1990s. For example, Cleaver and Freeman (1995) found that in more than half the cases of suspected child abuse they studied, families were experiencing a number of difficulties including mental illness or learning disability, problem drinking and drug use, or domestic violence. The focus on these particular factors in parents’ lives was reinforced in subsequent studies led by Cleaver (Cleaver et al., 1999; Cleaver et al., 2007; Cleaver and Nicholson, 2007), and built into the development of national assessment frameworks (Cleaver and Walker, 2004; Cleaver et al., 2004) and an influential briefing for family justice professionals (Brown and Ward, 2013).

Over the same period, regular overview analyses of Serious Case Reviews (SCRs) began to be commissioned to draw out themes and trends to inform policy and practice. A SCR (now a Child Safeguarding Practice Review) is carried out by a Local Safeguarding Children Board (LSCB; now replaced by Safeguarding Children Partnerships) in a small number of exceptional cases where abuse or neglect of a child is known or suspected and either a child has died or has been seriously harmed and there is cause for concern regarding the safeguarding performance of the local authority, their Board partners or other relevant persons. The factors identified by Cleaver et al., featured heavily in these SCR overviews. Brandon et al. (2008, p. 85) argued that 'families shared many similar characteristics, particularly in the preponderance of domestic violence, mental health difficulties and substance misuse among parents and carers.' The reviews stated that it was much more common for these features to '...exist in combination than singly' (p. 85), since 'separate factors interact to cause increased risks of harm to the child' (p. 4). In Brandon et al. (2009, Table 20), the term 'toxic caregiving environments' was first used. The 'toxic environment' was described as 'domestic violence, mental ill health, substance misuse etc. learning disability' (ibid). In a single authored piece in the same year, Brandon coined the phrase 'toxic trio' (2009, p. 1109). In the next SCR overview, Brandon et al. (2010, p. 54) wrote that, 'Following the earlier work of Cleaver et al. (1999) we have identified a potentially "toxic trio" of parental substance misuse, violence and mental health problems which often coexist.'

A number of the issues which have muddled thinking about the 'toxic trio' as a source of risk to children are already apparent in this brief summary of how the term emerged. From the start, there was uncertainty over the inclusion or exclusion of parental learning disability. The 'trio' also sometimes appear alongside, and sometimes distinguished from, other factors at the level of the individual, family and wider environment. At times these factors are described as 'parental behaviours' (Brandon 2009, p. 1109) although mental ill-health or being the target of

violence are hardly ‘behaviours’ nor necessarily deserving of the label ‘toxic’. There is also a lack of clarity about whether these factors are significant simply because of their *cumulative* effect (see Monroe & Simons, 1991), or as a result of some particular *interaction* of the factors.

The idea of the ‘toxic trio’ rapidly caught hold in policy making and in practice. It was fuelled subsequently by anxieties surrounding the death of Peter Connelly – Baby P (Jones, 2014), and inner city riots in the summer of 2011. The then Prime Minister, David Cameron, blamed families for ‘disruption and irresponsibility that cascades through generations... these families cost (the state) an extraordinary amount of money....’ (<https://www.gov.uk/government/speeches/troubled-families-speech> ). In 2013, influential guidance for family justice professionals on the timeframe for decision making about children, funded by the Department for Education, was widely circulated through the courts and by CAFCASS. It focused on ‘problems such as mental illness, learning disability, substance misuse and domestic violence’ and described them repeatedly as ‘toxic’ (Brown and Ward, 2013: 17). By 2014/15 local authorities were being required by the Department for Education to record and report on the existence of parental drug or alcohol use, domestic violence, mental or physical ill-health and learning disability in assessments of children in need. Subsequently, Morris et al. (2018) found the term ‘toxic trio’ routinely used by duty and assessment social workers in their study of children’s social care practice in 14 sites across 6 Local Authorities. They commented that the ‘toxic trio has clearly entered the lexicon of social work’ (p. 368), and they observed that its use functioned as a shorthand for the presence of risk of serious harm in families. The Association of Directors of Children’s Services (ADCS 2016; 2018) have offered their impression that the ‘toxic trio’ or ‘trigger trio’ are a major driver of increases on children’s services caseloads and the numbers of children being taken into care.

However, there has also been some emerging criticism of the ‘toxic trio’ concept and language, including from a key member of the SCR teams:

Not only are these three factors neither necessary nor sufficient to explain child maltreatment, they are also not the only parental risk factors recognised... as a label it is deeply stigmatising and does not help in appraising the real nature of any family dynamics, and of any support or protection needed for the child or family. If I, as a parent, happen to suffer from depression or anxiety, or any of the myriad other forms of mental health disorder, I do not want to be labelled as toxic. (Sidebotham, 2019)

The ADCS also began to move away from the language of ‘toxicity’ in their 2018 Safeguarding Pressures report, although not from the importance of the underlying factors, giving evidence of their prevalence in current caseloads.

## **Method**

We used three search methods to identify eligible empirical studies for our systematic review. First, using all fields, language and dates, we searched 7 electronic databases,: Google Scholar, Science Direct, PubMed, PubPsych, JStor, Web of Science and Cambridge University’s iDiscover (which searches all articles and books within the University of Cambridge’s access).

We used the following variations of search terms:

- “Toxic Trio”
- “Toxic Trio AND Social Work”
- “Toxic Trio AND Children”
- “Toxic Trio AND Parenting”
- “Toxic Trio AND Domestic\* AND Parental Substance\* OR Substance\* OR Alcohol\* OR Drug\* AND mental health”
- “Toxic Trio AND Domestic\* OR Intimate Partner Violence OR IPV AND Parental Substance\* OR Substance\* OR Alcohol\* OR Drug\* AND Mental Health AND Learning Disab\* OR Learning Impair\*”
- “(Toxic Trio) AND (Domestic\* OR Intimate Partner Violence OR IPV) AND (Parental Substance\* OR Substance\* OR Alcohol\* OR Drug\*) AND (Mental\*) AND (Learning\*)”

- “Domestic\* OR Intimate Partner Violence OR IPV AND Parental Substance\* OR Substance\* OR Alcohol\* OR Drug\* AND Mental Health”
- “Toxic Trio AND ((Domestic\* OR Intimate Partner Violence OR IPV AND Parental Substance\* OR Substance\* OR Alcohol\* OR Drug\* OR Mental Health) OR (Parental Substance\* OR Substance\* OR Alcohol\* OR Drug\* AND (Domestic\* OR Intimate Partner Violence OR IPV) OR Mental Health) OR (Mental Health AND (Domestic\* OR Intimate Partner Violence OR IPV) OR Parental Substance\* OR Substance\* OR Alcohol\* OR Drug\*))”
- (Parent\*) AND (Child Abuse OR Neglect\* OR Child Maltreatment OR Emotional abuse OR Physical Abuse OR Sexual Abuse OR Abuse\* OR Social Work) AND ((Mental Health OR Mental Illness) OR (Substance\* OR Drug\*) OR (Alcohol\*) OR (Domestic\* OR Intimate Partner Violence OR IPV) OR (Learning Disability OR Learning difficulty))
- (Parent\* OR Father OR Mother) AND (Child Abuse OR Neglect\* OR Child Maltreatment OR Emotional abuse OR Physical Abuse OR Sexual Abuse OR Social Work) AND ((Mental Health OR Mental Illness) AND (Drug\* OR Substance\*) AND (Alcohol\*) AND (Domestic Abuse OR Domestic Violence) OR (Learning Disability OR Learning difficulty))

There were some difficulties in separating learning disabilities and mental health within samples, so both search terms were included. Second, once key papers were identified, a ‘WHO CITED’ search was conducted within Google Scholar to identify further relevant papers. We also, third, searched through the Department for Education’s ‘Children’s Needs - Parenting Capacity’ (Cleaver et al., 2011) for relevant papers and references. Grey literature was included in our sample where all inclusion requirements were fulfilled. It is possible due to the selection of academic search engines that some grey literature may have been missed in our search strategy.

We included studies based on the following criteria: 1) the research paper had to directly compare parental risk factors to child outcomes, 2) the paper had to investigate at least two or more of the five factors considered as part of the ‘toxic trio’, 3) the data had to be empirical and quantitative in nature, 4) In line with widely-held epistemic standards common to the evaluation of research evidence, papers had to satisfy eight criteria detailed in Table 1.

[Table 1 here]

Studies were not eligible for inclusion if: 1) they did not directly compare parental risk factors to child outcomes, 2) they only reported information on a single toxic trio factor in relation to child outcomes, 3) the analyses of parental factors in question could not be sufficiently differentiated from other risk factors also under investigation, 4) they were qualitative in design, 5) a more recent wave of longitudinal data had been published. We excluded review articles, though these informed our search terms.

The screening and selection process is displayed in the flow chart (Figure 1). In the case of discrepancy, the full text of the paper was screened in order to make a final decision. Examples of papers which were fully screened, but subsequently excluded are detailed in Supplement 1.

Findings of the systematic review were discussed with members of the National Children’s Bureau’s Families Research Advisory Group. This is a group of parents, including those with experience of social care, who are supported to advise on research affecting children and families. Through a video conference seminar, the Group were consulted in the interpretation of our findings, and our conclusions incorporate these reflections.

## **Results**

Only 20 papers met the criteria for inclusion. 15 papers were from UK samples, 3 were from the USA, 1 from Canada and 1 from Ukraine, with dates ranging from 2002-2020. The 20 papers were of three kinds: Serious Case Reviews (SCR) (see Supplement 2 for an overview); papers that provided some information on two or more factors included within the ‘toxic trio’, but did not investigate their relationship (see Supplement 3 for an overview); and papers that empirically investigated the relationship between two or more factors and how they impacted child outcomes (see Supplement 4 for an overview).

*Figure 1 about here.*

## **Serious Case Reviews**

Our search found 8 Biennial and Triennial overviews of SCRs between 1998-2017 which reported information on at least 2 of the 5 factors in the 'toxic trio'. The majority of these reviews were carried out by the same research team – a limitation that was explicitly acknowledged (Sidebotham et al., 2016, p. 11).

Sinclair and Bullock (2002) in the first SCR overview, claimed an interaction between the factors included in the 'toxic trio'. 14 of their sample of 40 primary caregivers had both mental health issues and currently abused alcohol and/or drugs. 10 of the primary caregivers with mental health problems were also known to have displayed violent behaviour in the family home. Subsequently, Brandon and colleagues (2008) examined an 'intensive sample' of 47 cases within a larger group of 161 SCRs. They found all three factors to be present 34% of the time, two factors present 34% of the time, a single factor present 19% of the time, and no factors present in 13% of parents. They concluded that 'The added impact of parental mental ill health, to the known risks of harm to children when domestic violence and parental drug or alcohol misuse coexist, is a potential risk factor which should inform both assessment and intervention' (p. 3).

Subsequent SCR overviews continued to feature reports of the role of substance use, mental ill-health and domestic violence, and to a lesser extent drug use and learning disabilities, but with variations in how single or combinations of factors were recorded. At least one factor is mentioned in between 75% and 86% of individual SCRs between 2005-7 and 2014-17, with three (or, in 2014-17, four) factors seen in combination in around 20% of cases.

However, despite their influence, and notwithstanding the quality of the reviews undertaken, it is doubtful how useful the SCR overviews are as evidence for the 'toxic trio' in child protection cases generally. First, none of the SCRs overviews claim to be representative of child protection cases as a whole. SCRs only take place in cases which are extreme outliers. They have been carried out at an average rate of less than 100 per year. This constitutes less than 0.025% (1 in 4000) of the approximately 400,000 episodes of a child in need starting each year for the past decade; less than 0.16% (1 in 630) of the children starting a child protection plan in the years 2012/13 to 2018/19 on the basis of actual or potential serious harm to the child (DfE, 2019).

Second, SCRs are carried out in a wide variety of circumstances besides child abuse or neglect perpetrated by parents. They include suicides, child murders, tragic accidents and sudden infant deaths (often of undefined cause). For example 21% in the 2007-9 SCR sample (Brandon et al., 2010) and 16% in the 2009-11 SCR sample (Sidebotham et al., 2012) included 'harm from childminders, foster carers, and harm which occurred in supervised settings such as hospitals, school or residential care', and it is not clear how these cases are differentiated from non-accidental harm by birth parents.

Third, the definitions used for each of the five elements of the 'toxic trio' are not clearly described in any SCR review. Problems with this lack of definition include whether data relates to past or current problems, wide variety in the extent and type of drug and alcohol usage, a lack of clarity as to who is the user of drugs, different types and severity of mental health issues which may be diagnosed or undiagnosed, a lack of precision regarding whether intellectual disabilities were included under the definition of mental illness or excluded, uncertainty about

which parent’s mental health was compromised, and different interpretations of what constitutes domestic violence.

Fourth, as the authors point out, the overviews are dependent upon the details included in individual case reports and prior judgements made about which factors are considered relevant. Additionally, as ‘toxic trio’ thinking became entrenched in policy, data collection and practice, the process of finding these factors may have become somewhat self-reinforcing.

Fifth, this means that other factors may have been excluded or not systematically reported in SCRs and therefore in the overviews. In the most recent overview (Brandon et al., 2020) the authors repeatedly make it clear that SCRs reflect complex multi-faceted situations, not only in the parents’ lives but in the wider environment. A range of other factors beyond the trio are mentioned as frequently occurring in the cases. These include parental separation (54%), poverty (35%) and parental criminal record (30%).

Finally, despite the repeated extended discussion of the ‘trio’ factors in all these reports, there is little or no discussion or theorising about *how* the interaction of these factors contributes to child protection concerns for children. Claims are variously made that the factors are additive or cause harm in interaction, without acknowledging that these are distinct proposals (Bauer, 2014; Bauer et al., 2014).

While none of these concerns reduce the value of SCR overviews as sources of learning for the most extreme cases, they do signal important limitations regarding their viability as a basis for policy making or practice for the whole system of child protection.

### **Studies providing information without intersectional analysis**

Six research studies provided information on the five factors within the 'toxic trio' but did not provide a statistical analysis of their relationship.

Cleaver and Walker (2004) reported results from an audit of three-quarters of 866 initial assessments from 24 local authorities. They identified various factors within the family that had an impact on parenting capacity. These included domestic violence, mental illness and parental drug and alcohol misuse. In 61 cases (7%) the research team classified the case as having 'multiple problems' (p. 85). No information is provided about which of these factors were combined.

Cleaver and colleagues (2007) investigated 357 assessments in cases where there was concern about the child's safety from 6 London Boroughs. In 55 cases (20.9%) domestic violence and alcohol misuse were identified, and in 36 cases (13.7%) domestic violence and drug misuse were identified. However, cases were only included when domestic violence or substance use was present. The findings therefore cannot be used for any counts of overall prevalence in the wider child protection population. The conclusion that 'social work case files showed that domestic violence or parental substance misuse seldom exist in isolation' (Executive Summary, 8) cannot be generalised beyond this sample. The authors offered no discussion of how or why these factors might combine or how such an interaction would impact on children.

More recently, CAADA (2014) analysed the case records of 877 children in families where domestic violence was known to be present. They found that substantial numbers of parents disclosed mental ill health (25% mothers, 17% fathers) or problematic use of alcohol/drugs (13% mothers, 25% fathers). A third of mothers (31%) and a third of fathers (32%) had

disclosed either mental ill health or substance misuse, or both. However, this sample only included children where domestic violence was known to have occurred, and, again, cannot be taken as representative of the wider population of children about whom there are child protection concerns.

Berger (2005) drew data on 2,760 families with children from the US 1985 National Family Violence Survey. He analysed relationships between income, family characteristics, state characteristics, and physical violence towards children among single-parent and two-parent families. In both single-parent and two-parent families, respectively, depression ( $\beta = .202$ ,  $z = 1.760$ ;  $\beta = .196$ ,  $z = 3.040$ ) and maternal alcohol consumption ( $\beta = .183$ ,  $z = 2.180$ ;  $\beta = .112$ ,  $z = 2.170$ ) affected children's probabilities of reporting abuse. Additionally, within their ordered probit models, lower income was significantly related to violence toward children in single-parent families ( $\beta = .324$ ,  $z = 1.900$ ). This paper discusses a range of hypotheses regarding how parental and child factors and the wider economic and policy context may combine to increase the chance of abuse. However, its outcome measure is physical abuse, which is reported to be a factor in only around 8% of child protection cases in England currently (DfE 2019). Furthermore, the telephone sample was taken from the early 1980s in the USA with its limited welfare state. While a valuable contribution, the international applicability of this study is questionable.

Simkiss and colleagues (2012) utilised a nested case control methodology using routine primary care data from the United Kingdom on children who entered care. Health service use data were extracted for the 12 months before the child was taken into care (147 case dyads) and compared with 12 months of data for four control mother-child pairs per case pair, matched on the age and sex of the child and the general practice involved (538 control dyads). Fathers

were not included in the analysis. The researchers explored the relationship between each of their individual variables and the risk of the child being taken into care, followed by a stepwise multivariate conditional logistic regression model to investigate the combined effect. Measures of domestic violence, maternal learning disability and maternal alcohol use were not found to be significant for entry to care. Among factors that did predict care were maternal mental illness ( $OR= 2.51$ , 95% CI 1.55-4.05) and maternal drug use ( $OR= 28.8$ , 95% CI 2.29-363). However, all of these, other than maternal mental illness, involved tiny numbers of identified cases: domestic violence, 7; learning disability, 1; alcohol use, 6; maternal drug use, 7, generating very wide confidence limits. It is notable that this was the only paper in our review to explicitly investigate learning disability as a separate factor. Other factors had greater predictive power with larger numbers of cases, including: membership of most disadvantaged quintile by socioeconomic status (SES;  $OR= 7.14$ , 95% CI 2.92-17.4,  $p < .001$ ); or the second most disadvantaged quintile ( $OR= 3.40$ , 95% CI 1.58-7.32,  $p = .002$ ) and child mental illness ( $OR= 2.65$ , 95% CI 1.42-4.96,  $p = .002$ ). The study did not seek to offer theoretical reflections on the interaction of the factors identified as leading to care entry.

Tutty and Nixon (2020) investigated 504 mothers with children 18 years and younger from three Canadian provinces who participated in a study of the impacts of intimate partner violence. The researchers compared the demographic profile, self-reported mental health/well-being, and self-reported caregiving strategies of mothers whose children were taken into care with those whose children were not. The mothers with children in care reported a significantly higher mean difference in physical abuse from their partners ( $t= 2.1$ ;  $p < .04$ ,  $r= 0.06$ ), a very weak effect. On the mental health measures, mothers with children in care reported significantly more psychological distress, with a weak effect however (in the clinical range;  $t= 2.8$ ;  $p = .005$  ;  $r= 0.08$ ), but no differences on depression ( $t= 0.6$ ,  $p = 0.55$ ) or PTSD symptoms

( $t= 1.5$ ,  $p= 0.12$ ), with neither in the clinical range. More women with children in care reported addiction ( $\chi^2 = 14.2$ ;  $p= .001$ ; Cramer's  $V= 0.17$ ), though again this was a weak effect.

### **Studies investigating relationships between the five 'toxic trio' factors**

Since the work of Brandon and colleagues, it has been commonly asserted that the trio factors make a cumulative contribution to risk to children. Yet our search was only able to identify 5 papers that statistically investigated the relationship of two or more of the 'toxic trio' factors to child outcomes.

Woodcock and Sheppard (2002) identified 223 women in 2 local authorities in the south of England who were known to social services. Their study focused on depression, defined using the Beck Depression Inventory (BDI). Three groups were created: non-depressed, non-clinical depression, and clinical depression. The study identified women who had a record of sustained drinking over at least six months, and where the women, in their own judgement, felt a strong need to drink. A comparison was made between women who were clinically depressed and women who were both clinically depressed and alcohol dependent ( $n= 19$ ). Based upon social worker judgement from a clinical interview with the mother, the latter group had greater problems in social relationships within Mann Whitney-U tests ( $U= 266.5$ ,  $p< .001$ ), poorer health ( $U= 441.5$ ,  $p= .006$ ), more problems with the parental role ( $U= 441.5$ ,  $p= .006$ ), and more problems with their child ( $U= 516.5$ ,  $p= .041$ ). The study did not measure child outcomes or substantiated child protection issues.

Burlaka et al. (2017) conducted a survey of the use of positive and negative parenting practices in Ukraine, exploring relationships between parenting practices, intimate partner violence, alcohol use, and sociodemographic factors. Using flyers and posters in schools, they recruited

320 parents of children aged 9–16 from three regions. Negative parenting practices, which were used to indicate worse parenting, were calculated using a sum of answers to questions about inconsistent discipline, poor monitoring, and use of corporal punishment. No direct questions were asked about abuse or neglect. The researchers did not measure parental mental health. 84% of parents reported having experienced psychological or physical violence or sexual assault from their intimate partners during past year. This is a surprisingly high figure and may reflect the fact that domestic violence rates are unusually high in Ukraine, although this cannot be confirmed by comparison with other studies. It most likely highlights issues with the sample recruitment, which utilises a cross-sectional design, relies on retrospective recall and most respondents were female. However, within this study reported partner violence had a clear association with self-report of negative parenting practices ( $r = .52$ ). Alcohol use was also associated with negative parenting practices ( $r = .35$ ). Furthermore, there was a significant indirect effect of alcohol use, mediated through intimate partner violence, on self-reported negative parenting practices ( $\beta = 0.11, p < 0.001$ ). However, the study did not investigate the potential cumulative role of partner violence and drug or alcohol use for negative parenting practices. Additionally, the relevance and generalizability for international child protection practice of this study of self-reported parenting practices with a self-selecting sample of parents of older children in the Ukraine is extremely limited.

Whitaker et al., (2006) examined the cumulative effect of self-reported maternal mental health disorders (depression or anxiety), substance use (including smoking), and domestic violence (physical or emotional) on child outcomes using a birth cohort (1998-2000) from 18 US cities, following 2756 children up for 3 years (65% of all births). The outcome measure was maternal report of behavioural problems in the child (assessed using the Child Behaviour Checklist). The prevalence of child behaviour problems increased with the number of categories (0, 1, 2,

or 3) in which the mother reported one of these factors: respectively, 7%, 12%, 17%, and 19% for aggression ( $p < .001$ ); 9%, 14%, 16%, and 27% for anxious/depressed ( $p < .001$ ); and 7%, 12%, 15%, and 19% for inattention/hyperactivity ( $p < .001$ ). This graded risk of maternal-reported behavioural problems in the child persisted after adjustment for sociodemographic and prenatal factors and for paternal mental health and substance use. There were no measures of abuse or neglect.

Fuller-Thomson et al. (2019) drew upon data from the regionally representative 2010 and 2012 Brief Risk Factor Surveillance Survey (BRFSS) of adults (2010:  $n=9,241$  men,  $n=13,627$  women; 2012:  $n=11,656$  men,  $n=18,145$  women). The authors explored domestic violence, parental addictions (either drugs or alcohol), and parental mental illness (as interpreted by the participant, which may have included or excluded intellectual disability) and their relationship with self-reported physical abuse in childhood in the USA. Physical abuse was assessed using the question: 'did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking.' (Never vs. ever). On this measure, 17% of women and 18% of men reported physical abuse. It should be noted that this is higher than the 8% found in the UK using a similar measure (Radford et al. 2013). For women, the likelihood of self-reported physical abuse increased when parental addictions ( $OR= 2.96$ , 95% CI 2.52-3.49), parental mental illness ( $OR= 3.87$ , 95% CI 3.19-4.70) or domestic violence ( $OR= 9.84$ , 95% CI 8.07-11.98) were reported in isolation. The likelihood of self-reports was compounded when two or more of these factors were present together. For example, the likelihood of self-reports increased when parental addictions and parental mental illness were present ( $OR= 5.70$ , 95% CI 4.71-6.90), when parental addictions and domestic violence were present ( $OR= 12.64$ , 95% CI 10.67-14.96), and when parental mental illness and domestic violence were present ( $OR= 22.09$ , 95% CI 16.24-30.05). In comparison with those with no risk factors, when all three risk

factors were present, women had 32.7 times (95% CI 26.93-38.35) the odds of reporting childhood physical abuse.

For men, the likelihood of reported physical abuse increased when parental addictions ( $OR= 3.19$ , 95% CI 2.67-3.81), parental mental illness ( $OR= 2.85$ , 95% CI 2.16-3.75) or domestic violence ( $OR= 7.53$ , 95% CI 6.16-9.22) were present in isolation. Again, the likelihood of physical abuse was compounded when two or more of these factors co-occurred. For example, it increased when parental addictions and parental illness were present ( $OR= 5.52$ , 95% CI 4.38-6.96), when parental addictions and domestic violence were present ( $OR= 11.15$ , 95% CI 9.18-13.55), and when parental mental illness and domestic violence were present ( $OR= 16.40$ , 95% CI 10.51-25.58). In comparison with those with no risk factors, when all three risk factors were present, men had 44.7 times (95% CI 34.07-58.51) the odds of self-reports. Age and ethnicity were taken into account but family SES was not analysed by the researchers. This was despite the fact that SES variables were available in the BRFSS. Domestic violence was a particularly strong predictor of self-reports; the authors concluded that 'homes in which violence is present are often exposed to other stressors and adversities' (op. cit., 14). However, addictions or mental illness in the absence of domestic violence were not strong predictors. The authors acknowledge that no data was collected to enable a temporal link between the 'trio' of factors and the occurrence of physical abuse. The question about physical abuse also provided no indication of seriousness, harm, or whether the violence was repeated.

Hood et al. (2020) used latent class analyses to create typologies of demand based on the needs of children identified in social work assessments undertaken with potential children in need. The factors at assessment were drawn from the prescribed list required to be reported by the Department for Education. This includes the trio factors but excludes, for example, socio-

economic and demographic data. Their sample cases were drawn from two unitary authorities in inner London, three unitary authorities in outer London and one county council in the Southeast of England. In total there were 80,448 assessments carried out in the period 2014-18 in which factors were recorded. The latent class analysis was run on a random sample of 2,500 episodes from each LA (15,000 in total). The analysis resulted in 7 categories:

1. Neglect, with few other factors recorded
2. Domestic violence, with emotional abuse and alcohol abuse co-occurring in a small number of cases.
3. Physical abuse, with emotional abuse and neglect co-occurring in a small number of cases
4. A category of various factors suggesting lack of control or sexual abuse: socially unacceptable behaviour (26%), child's mental health problems (21%), sexual abuse (16%), CSE (12%), child's drug misuse (10%) and/or self-harm (9%).
5. The most common category overall (26% of cases) was described as 'multiple complex needs I'. 43% of cases involved domestic violence, 42% parental mental health problems, 25% parental alcohol use, 21% parental drug use.
6. The category 'multiple complex needs II' was identified for only 3% of cases but involved much higher proportions of the trio factors as well as other concerns. For example, domestic violence was a feature of 76% of these more complex cases.
7. Children with learning and physical disabilities, sometimes co-occurring with parental mental health problems.

Hood and colleagues found that of cases in categories 2 (domestic violence) and 5 ('multiple complex needs I') - comprising 43% of the sample - less than half the children were assessed as 'in need' and less than one in five progressed to a protection plan or were admitted to care.

However, in the small proportion of category 6 cases (‘multiple complex needs II’), over 80% were considered in need, with over 50% progressing to a child protection plan or into care. Further investigation of these data by the authors is presently underway.

## **Discussion**

This article aimed to assess the strength of the evidence for the focus on the ‘toxic trio’ in child safeguarding policy and practice. Many of the studies we identified show evidence of the challenges faced by social science researchers in fields such as this, where variables are multiple and complex, standard definitions are lacking, basic demographic and socio-economic data are not routinely collected, and theory is undeveloped (Lacey and Minnis, 2020). We summarise our findings in terms of the 8 criteria for a solid evidence base for policy and practice (Table 1).

### **1. Clear and consistent definitions of the variables.**

A variety of more or less well-defined measures are used across the studies for the five factors in the ‘trio’ – though the inclusion of learning disability as a separate category is vanishingly rare. In the SCR studies no definitions are provided, and in empirical studies details of how the terms were operationalised are often not available. Four main types of source were used: social care case reports; files and serious case reviews produced for purposes other than research; self-report responses to surveys or interviews, sometimes including the use of standard inventories or instruments; and medical records.

As Brandon et al. (2020) make clear, a reliance on case reports or records that do not follow a fixed format or definitional guidelines means that information is often not available and/or

findings are not readily comparable. Studies based on case reports or records rely on researchers extracting indicators that the factors were present from the records: for example, the SCRs are third-hand reports. Details about the factors’ temporal proximity, severity, diagnosis, treatment and so on are often not obtainable. Even when standardised, definitions can be anything but precise. Hood et al., (2020), for example, rely on categories used for statistical returns to the Department for Education annual child in need census. The guidance says that, for instance, mental health is to be recorded as a factor when, in the social worker’s judgement, there are ‘concerns about the mental health of the parent(s)/carer(s)’ (DfE, 2018, p. 42). Drug or alcohol abuse or domestic violence are similarly defined in terms of the presence of ‘concerns’, with no further attempt at precision.

Self-report studies, whether using standard questionnaires or not, also have their limitations in terms of specificity, comparability or equivalence with substantiated abuse or neglect. The medical notes used by Simkiss et al. (2012) offer the prospect of greater precision, and in terms of maternal mental health a number of specific categories are accessible through the notes. These distinguish between depression, bipolar disorder and psychosis, and consider severity in terms of whether the case was handled in primary care or referred for specialist psychiatric services. However, these distinctions in the data were collapsed by the researchers in their analysis into a single entity of maternal mental illness. Other categories with a less clear medical diagnosis, such as domestic violence and abuse, are ill-defined in the study.

In our consultation with the National Children’s Bureau’s Families Research Advisory Group, the parents were particularly concerned about the lack of definitional precision. They identified the possibility that wealthy parents drinking or recreational drug use is likely to be interpreted differently to equivalent substance use issues in a less well-off family.

2. Clear and comprehensive data about the population affected.

Most of the studies included make only limited attempts to outline, or to use as analytical categories, basic demographic details about the children studied such as their age, gender, ethnicity or disability. In some studies, such as Whitaker et al. and Burlaka et al. (2017), age is a criterion for inclusion with only a limited period of childhood under consideration.

In England, data on age, sex and ethnicity are routinely recorded in official returns to the Department for Education, although child disability data secured through children’s social care records are unreliable (Bywaters et al., 2016a). Where such factors are included in analysis, as in Hood et al. (2020), significant differences are found, for example, in patterns for younger and older children. Given that rates of abuse and neglect vary significantly by age and ethnicity (Bywaters et al, 2018) consideration of these variables would be important and expected to be routine. As the parents in the Families Research Advisory Group commented, the ‘trio’ are unlikely to play out in the same way across childhoods, for example, for a neglected child under 1 and a teenager experiencing sexual exploitation. Yet little clarity is available from the studies in the present review about which children are particularly vulnerable to different combinations of the factors proposed as ‘toxic’.

3. Clear and relevant outcome measures.

A variety of outcomes measures are utilised, only some of which directly relate to substantiated abuse or neglect. Two of the identified studies (Berger, 2005; Fuller-Thomson et al., 2019) narrow the outcome to self-reported physical abuse only. When pre-set definitions are employed, as in Fuller-Thomson et al., (2019), they can be broad and lacking in nuance. ‘Never vs ever’ binary choices (‘did a parent ever... physically hurt you in any way’) means that the

relationship of the factor to (in this case) physical abuse in terms of temporal proximity, frequency, severity or to substantiated abuse etc. is unexplored and unavailable. Several other studies focus on parenting behaviours and assume or imply, rather than evidence, harm to children without considering whether such harm would meet the thresholds for abuse and neglect. These definitions of good and bad parenting behaviours may also be culturally dependent and therefore further minimise generalizability. Where the outcome measure indicates some degree of substantiated concern about a child’s development these vary widely, from an initial assessment to being placed in out of home care. Other outcome measures include self-reported behavioural problems. A clear link to child maltreatment is rarely achieved. Indeed, the evidence from Hood et al. (2020) suggests that in many cases where ‘toxic trio’ factors are found to be present, no substantiated evidence of actual, or the risk of, significant harm was found by social workers.

#### 4. A clear theoretical framework.

There has been remarkably little theory building around the ‘toxic trio’. Theory matters because without an explanation of why significant relationships are found between factors and outcomes, it is impossible to design well targeted and policy and practice responses that address the causes. Even the basic matter of whether effects are simply additive or whether a consequence of interaction of two or three factors has been barely discussed; in fact these different accounts are frequently conflated.

There is little discussion about how exactly these factors might be causally connected in adults’ lives. Equally, there has been relatively little exploration of how any of the factors, separately or together, might impact on children. Policy and practice responses would differ very substantially if the impact were concluded to be through attachment, parenting capacity, the material or social resources for parenting, or a child’s self-esteem. Few studies consider the

role that resilience or coping strategies might play. None discuss the impact of service provision or treatment on parents or on child outcomes.

The most extended theoretical discussion of the relationship between trio factors and child harm is found in Brown and Ward (2013). Their argument rests on psychological research that prioritises the prenatal period and infancy. But such claims are strongly contested (e.g. Wastell and White, 2017), including by psychological researchers themselves (e.g. Facompré et al. 2018, who document stronger effects for interventions *after* infancy). Moreover, Brown and Ward (Table 2.1) identify 38 factors associated with a higher likelihood of significant harm, including ‘poor home conditions’, ‘housing instability’, professionals’ ‘lack of resources’ and ‘violent unsupportive neighbourhood’, but these factors are excluded, without justification, from their theoretical framework.

#### 5. Measurement issues and the use of appropriate and standardized statistics.

Even when definitions of outcomes are clear, there are often issues with the measurements of the factors within the five ‘trio’ factors. For example, research on these issues usually looks at the influence on parenting capacity over a relatively short period. This approach does not take into account the differing needs of the child at various times in their life or the fluctuating nature of drug and alcohol use, mental illness or domestic violence. The implications of parental intellectual disability should also not necessarily be assumed to be stable. Longitudinal studies would help minimise this limitation.

Furthermore, most research is centred on a specific issue such as domestic violence, depression, or drug use. In practice, many substance users will use a variety of drugs and alcohol. Similarly, many of those experiencing domestic violence also suffer depression. It is also often challenging to measure the quantities of drugs and alcohol being used by parents, the degree

of violence experienced, or the extent of mental illness or learning disability. A further limitation of the research identified is the dependence on participant recall and self-reports. Drugs and alcohol, domestic violence, mental illness and learning disabilities all may adversely affect the capacity to remember, and many studies rely not only on recent memory but long-term memory.

In addition to measurement issues, limited use of consistent scales or standardized statistics hinders meaningful comparison between studies. For example, measures of depression in the papers utilise variously: the Beck Depression Inventory (BDI), GP record codes, the Centre for Epidemiological Studies Depression scale (CES-D-10), Yes/No Likert scales, the WHO Composite International Diagnostic Interview Short Form (CIDI-SF) – or no definition at all in the case of SCRs. Further issues arise with the use of ‘composite’ measures devised within studies, which often selectively aggregate variables for the sake of statistical power.

In order to more easily compare, taking account of sample, distributions, variable, predictor and scale differences, there is a need to produce both simple effect sizes, where one describes the size of effect but remains in the original units of the variables, and standardised effect size statistics, where the units of variables are removed. This would allow, in addition to the commonly relied upon *p*-value, studies to provide information on both the magnitude and direction of differences found and where standardised effect size statistics are reported, direct comparison between differences and trends across studies.

The only standardization of results seen in this review’s sample are percentages, which allow some comparability in prevalence between studies with careful consideration of the samples used. But these do not relate parental factors to child outcomes directly. The importance of

such reporting becomes clear when we consider Tutty and Nixon (2020) for example, who report several results at a  $p < 0.001$  level. However, their effect sizes for statistically significant results were principally small to negligible, casting doubt on the weight such findings should be given. Without meaningful reporting of standardized results, it is difficult to paint a clear picture of the impact the ‘trio’ factors have on child outcomes.

6. Control for contextual or confounding factors.

A central difficulty with the dominance that the ‘toxic trio’ has achieved in recent years is that it can become self-reinforcing, while other factors are ignored or treated as merely contextual. For example, parents in the Families Research Advisory Group were concerned that ‘toxic trio’ discourse may distort how social workers think about families that are struggling and the focus of assessments. They reported conversations with social workers that concentrated disproportionately on their own emotional wellbeing and relationships as opposed to the support needs of their child. The Families Research Advisory Group also suggested that it required confidence and skill on the part of parents to steer the conversation away from parenting capacity and towards support needs. They thought this would be particularly difficult to achieve for parents with less resources and education. They were also surprised that housing was not seen as a key issue, one particularly relevant for families with disabled children.

While trio factors became embedded in children in need assessments, it is striking that the size and security of families’ income, employment and housing have been excluded from consideration (Morris et al., 2018). ‘Low income’ was one of the categories which could be recorded as the Primary Need resulting in the provision of services (DfE, 2018). But only one primary need can be recorded, so that the interaction of poverty with other factors is not reflected in data returns. Moreover, the definition of low income excluded all but the most

extreme cases: ‘an income below the standard state entitlements’ (ibid, 35). It is not surprising that many local authorities returned no children at all with a Primary Need of ‘low income’, even where dealing with families with no recourse to public funds or unaccompanied asylum seeking children (DfE, 2019: Table B3).

Recent studies (for example, Bywaters et al., 2018; Slack et al., 2017; Webb et al, 2020a) have reinforced the relevance of family socio-economic position as a key variable in child protection, presenting evidence of a steep social gradient. Wider evidence also shows that poverty is both a contributory causal factor and a consequence of poor mental health, domestic violence and substance use (Bywaters et al., 2016b; Cooper and Stewart, 2017; Rothwell & De Boer, 2014; Slack et al., 2017). Yet in most of the studies outlined, the multiple dimensions of parental socio-economic status, including housing instability and quality and homelessness, are not discussed, let alone considered as potential contributory factors in family stress, even when data is available. An exception is Berger (2005), who examined family income and found it significantly related to violence. Moreover, a substantial number of other factors are raised by one or other of these studies but have not been pursued in the same way, including parents’ age, marital status, criminal record, employment status, housing quality and security, childhood experience of social care involvement and educational attainment. The multiplicity of such factors underlines the need for a theoretical framework linking evidence on specific contributory factors with particular child outcomes.

## 7. Intersectionality analysis.

As we have seen, few of the studies reviewed here take an intersectional approach. Research on the impact of parental problems on children tends to be biased towards focusing on women as primary carers. There are more studies on maternal parenting capacity than paternal capacity, and often the influence of other family factors, such as the role of grandparents or

siblings, or the impact of divorce or separation, is not considered in the context of decision making about maltreatment. While Fuller-Thomson et al. (2019), for example, distinguish between male and female reporters of childhood physical abuse throughout, the age at which they were abused is not reported and neither ethnicity nor SES are factored into the analysis. None of the studies identified above effectively considers race or ethnicity. If ‘one size fits all’ approaches are to be avoided and solutions tailored to the particular circumstances of each child and family, it is important that studies differentiate between parents and children in terms of their ages, genders, ethnicities, health and SES when analysing the impacts of potentially negative childhood experiences. Of course, this is predicated on the data being available and large sample sizes achieved. In their absence, great caution has to be exercised about drawing firm conclusions about causal relationships (Webb et al., 2020b).

#### 8. Policy Context.

Despite evidence of some convergence in recent years, very different approaches to welfare provision and to child protection are found in different developed countries (Gilbert, 2011). In considering the impact of poor parental mental health, learning disability, domestic violence or substance use on children, therefore, the policy and practice context is an essential component. For example, the parents group pointed out the potential significance of the different kinds of health services available – or not – in different countries. The effect on children of poor parental mental health in a situation where entitlement to health care is dependent on the ability to pay and many are excluded from health insurance, will be very different from the experience in a situation where health care is freely available, accessible and effective. Illegal drug use in a context of supportive services aimed at harm reduction to the user or their children, or where parents have the finances to buy alternative care for their children, is potentially very different if the context is a focus on criminalisation. The relevance of research findings derived from one context (the USA, for example) to another, such as

England, can only be considered if that contextual information is set out. In these studies, the transferability of findings from the USA and the Ukraine is open to question. But even within the UK, studies need to contextualise the presence of parental difficulties by reference to the availability of policies, resources and services to enable parents to manage those difficulties. This is scarcely attempted.

### **Conclusions**

Parental mental ill-health, domestic violence, drug or alcohol use, and parental learning disability are undoubtedly important factors in children’s lives. However, they are not the only significant factors, singly or in combination, and the social and economic context in which these issues are experienced is inextricably implicated in their consequences for children. Our overall answer to the question posed in this article’s title is that the evidence is by no means good enough or ‘thick’ enough (Tholen, 2018) to justify the dominant position of the so-called ‘toxic trio’ in English child protection policy and practice. Parents we consulted wanted professionals and researchers to avoid all use of the ‘toxic trio’ language without creating alternative labels or jargon which might be equally unhelpful. It is not only the language that requires change.

A number of more detailed conclusions can be drawn from this review and the response of parents from the Families Research Advisory Group, each of which raises a series of further questions. The central point is that the evidence for the five ‘toxic’ factors in English (and to some extent international) child protection policy and practice is alarmingly weak and lacking in the detail and depth on which evidence-informed policies should be based. We do not know how prevalent these factors are, in combination, despite the best guesstimates (Children’s Commissioner, 2019), nor how many children are or are not experiencing abuse or neglect as a result. There are no large scale, high standard, and nationally representative studies on which

to base judgements about the relative contribution of these factors in combination to child maltreatment.

Second, hypotheses about *how* these and other factors may work in combination have barely been formulated, never mind tested. More sophisticated research methods such as latent class analysis or factor analysis (as Lacey and Minnis, 2020, have proposed for Adverse Childhood Experience (ACE) research) and multi-level modelling may be fruitful.

Third, studies rarely define the factors in any depth or detail how they are measured. For example, if mental illness is relevant, do all diagnostic categories have the same consequences? Do maternal and paternal illness have the same impact? Does the length and timing of the illness matter? What is it about the illness that affects the child? Or is it the side-effects of illness, such as stigma or the loss of employment, income, friendships or self-esteem, that have an impact? What kind of maltreatment is most likely to follow from which form of parental mental illness? How do treatment and care mitigate their impact? Equivalent questions could be asked of the other factors separately or in combination.

Fourth, the absence of an intersectional approach in most of the research means that we know even less about how these factors differentially affect children and young people of different ages or identities, with different backgrounds or living in different contexts. Which children, in which circumstances are affected by what combination of trio and other factors?

Fifth, too little attention has been paid in the studies to the role that is or might be played by the quality and availability of remedial or supportive *services* for parents or children. It is as if the factors are simply fixed and immutable, not amenable in themselves to treatment or support and with inevitable consequences for children under any circumstances. Given that over half of all children will have had experience of maternal mental illness by the age of 16 (Abel et al., 2019), is well-treated mental illness as damaging as untreated mental illness? Is the care of

the children of parents with learning disabilities as much at risk if a good range of support services are in place? What kinds of responses to domestic violence and abuse mitigate its impact on children?

Sixth, no studies have examined in any detail whether or how the availability of social, economic and environmental *resources* might influence the impact of the factors on childhood maltreatment, in addition to the impact of *services*. Does the strong social gradient in child protection interventions result from differential prevalence of the factors in families of different SES, or a differential ability to compensate for them or otherwise mitigate their effects? For example, how much difference does it make when extended family or other alternative carers are available, time and physical space are less pressured, or the material consequences less significant?

Finally, the dominance of the trio factors, embedded in routine processes and practices, data collection and reporting, and professional mind sets, has crowded out attention to other factors. At the household level, these include demographic factors such as parental age, parental separation or marital/co-habiting status; socioeconomic factors, such as the impact of poverty, poor quality housing or homelessness, and unpredictable employment or unemployment; and identity factors, such as ethnicity. What, for example, is the role of persistent insecurity in income, housing and employment on parental stress? Our critique here echoes Lacey et al.’s (2020, 4) examination of ACEs where they argue that poverty is not just one of a list of ACEs but rather is a prior ‘risk factor for many adversities’.

Children’s social care in England is facing extreme pressures, now exacerbated by Covid-19. Directors of Children’s Services have reported that it is becoming increasingly challenging to fulfil their statutory duties to provide help for children in need (Clements et al., 2017) and

children and families face less support, more investigations and more removals of children in response to their difficulties (Ellison & Renton, 2018). This review shows that the evidence base for the ‘toxic trio’ does not justify its current position in shaping child protection policy and practice. This review has consequences for consideration across government, beyond the Department for Education, in England, including for the Public Law Working Group and the proposed Care Review. The toxic trio concept is poorly specified and lacks a clear explanatory model. It has overshadowed consideration of other factors which would lead to a different orientation to practice, one that recognises that securing and maintaining trust between parents and services is a key issue, underpinned by an understanding that good parenting requires resources as well as skills.

On the basis of this review our parents group argued for a more open minded approach to assessment and for better research to understand what makes families struggle and what harms children, research that incorporates the experiences of parents and frontline professionals. The next steps for the sector are to unlearn the assumptions lying behind the pervasive attitudes of the ‘toxic trio’, to rethink the purpose and direction of child protection and to build a well-constructed evidence base to inform policy, service provision and practice.

### **Funding**

Work on this paper was supported by a Medical Humanities Collaborative Award from the Wellcome Trust [Grant Number: 218025/A/19/Z] to Robbie Duschinsky, Julie Anderson and Dustin Hutchinson

### **Acknowledgements**

The authors wish to recognise the contributions made to the development of this paper by a number of colleagues who read and commented helpfully on the work in draft form: Dez Holmes, Rick Hood, Ray Jones, June Thoburn and Calum Webb. We also thank

representatives of voluntary and community sector organisations working with children and families for their participation in a seminar to inform the framing of our conclusions, and to Ava Berry from NCB for coordinating this sector engagement. The final version is, of course, entirely our responsibility.

## References

Abel, K., Hope, H., Swift, E., Parisi, R., Ashcroft, D., Kosidou, K., Osam, C., Dalman, C. and Pierce, M. (2019) Prevalence of maternal mental illness among children and adolescents in the UK between 2005 and 2017: a national retrospective cohort analysis. *Lancet Public Health* 4: e291–300.

ADCS. (2016). Safeguarding Pressures Phase 5. Research Report: The Association of Directors of Children’s Services. [https://adcs.org.uk/assets/documentation/ADCS\\_Safeguarding\\_Pressures\\_P5\\_REPORT\\_Web\\_FINAL.pdf](https://adcs.org.uk/assets/documentation/ADCS_Safeguarding_Pressures_P5_REPORT_Web_FINAL.pdf) Accessed October 2020.

ADCS. (2018). Safeguarding Pressures Phase 6. Research Report: The Association of Directors of Children’s Services. <https://adcs.org.uk/safeguarding/article/safeguarding-priorities-phase-6> Accessed October 2020.

Bauer, G. R. (2014). Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social Science & Medicine*, 110, 10-17.

Bauer, G., Bowleg, L., Rouhani, S., Scheim, A., & Blot, S. (2014). *Harnessing the Power of Intersectionality: Guidelines for Quantitative Intersectionality Health Inequities Research*. London, Canada.

\*Berger, L. M. (2005). Income, family characteristics, and physical violence towards children. *Child Abuse & Neglect*, 29(2), 107-133.

\*Brandon, M., Bailey, S. and Belderson, P. (2010). Building on the learning from serious case reviews: a two-year analysis of child protection database notifications 2007-2009: research brief. London: Department for Education.

\*Brandon, M., Bailey, S., Belderson, P., Gardner, R., Sidebottom, P., Dodsworth, J., Warren, C. and Black, J. (2009). Understanding serious case reviews and their impact: A biennial analysis of serious case reviews 2005-2007. London: Department for Children, Schools and Families.

\*Brandon, M., Belderson, P., Warren, C., Howe, D., Gardner, R., Dodsworth, J., and Black, J. (2008). Analysing child deaths and serious injury through abuse and neglect: what can we learn? A biennial analysis of serious case reviews 2003-2005. London: Department for Children, Schools and Families.

\*Brandon, M., Sidebotham, P., Bailey, S., Belderson, P., Hawley, C., Ellis, C., Megson, M. (2012). *New learning from serious case reviews: A two-year report of 2009-2011*. London: Department for Education.

\*Brandon, M., Sidebotham, P., Belderson, P., Cleaver, H., Dickens, J., Garstang, J., Harris, J., Sorensen, P., & Wate, R. (2020). *Complexity and challenge: A triennial analysis of SCRs 2014-2017*. London: Department of Education.

Brown, R, and Ward, H, 2013, *Decision-Making within a child's timeframe*, 2<sup>nd</sup> Edition. London: Childhood Wellbeing Research Centre.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/200471/Decision-making\\_within\\_a\\_child\\_s\\_timeframe.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/200471/Decision-making_within_a_child_s_timeframe.pdf) Accessed October 2020.

\*Burlaka, V., Graham-Bermann, S. A., & Delva, J. (2017). Family factors and parenting in Ukraine. *Child Abuse & Neglect*, 72, 154–162.

Bywaters, P., Brady, G., Sparks, T., & Bos, E. (2016a) Inequalities in child welfare intervention rates: the intersection of deprivation and identity. *Child and Family Social Work*, 21 (4): 452-63.

Bywaters, P., Bunting, L., Davidson, G. Hanratty, J., Mason, W., McCartan, C. and Steils, N. (2016b) The relationship between poverty, child abuse and neglect: an evidence review. York: Joseph Rowntree Foundation. <https://www.jrf.org.uk/report/relationship-between-poverty-child-abuse-and-neglect-evidence-review> Accessed October 2020.

Bywaters, P., Brady, G., Sparks, T., & Bos, E. (2018). Child welfare inequalities: New evidence, further questions. *Child & Family Social Work*, 21(3), 369-380.

\*CAADA. (2014). *In plain sight: Effective help for children exposed to domestic violence*. Bristol: CAADA.

Children's Commissioner. (2018). *A Crying Shame*. Retrieved from: <https://www.childrenscommissioner.gov.uk/2018/10/17/almost-16000-babies-under-1-are-growing-up-in-toxic-households-at-risk-of-severe-harm-childrens-commissioners-report-reveals/> Accessed October 2020.

Children's Commissioner. (2019). *Estimating the prevalence of the 'toxic trio'*. <https://www.childrenscommissioner.gov.uk/wp-content/uploads/2018/07/Vulnerability-Technical-Report-2-Estimating-the-prevalence-of-the-toxic-trio.pdf> Accessed October 2020.

Cleaver, H., & Freeman, P. (1995). *Parental Perspectives in Cases of Suspected Child Abuse*. London: HMSO.

\*Cleaver, H., Cleaver, D., Tarr, S., Nicholson, D. (2007). *Child protection, domestic violence and parental substance misuse: Family experiences an effective practice*. Philadelphia, PA: Jessica Kingsley Publishers.

Cleaver, H., & Nicholson, D. (2007). *Parental Learning Disability and Children's Needs: Family Experiences and Effective Practice*. London: Jessica Kingsley Publishers.

Cleaver, H., Unell, I., & Aldgate, J. (1999). *Children's Needs-Parenting Capacity: The Impact of Parental Mental Illness, Problem Alcohol and Drug Use, and Domestic Violence on Children's Behaviour*. London: The Stationery Office.

\*Cleaver, H., & Walker, S. (2004). From policy to practice: the implementation of a new framework for social work assessment of children and families. *Child & Family Social Work*, 9(1), 81-90.

Cleaver, H., Walker, S., & Meadows, P. (2004). *Assessing Children's Needs and Circumstances: The Impact of the Assessment Framework*. London: Jessica Kingsley Publishers.

Clements, K., Ellison, R., Hutchinson, D., Moss, D., & Renton, Z. (2017). *No Good Options: Report of the Inquiry into Children's Social Care in England*. London: All Party Parliamentary Group on Children. <https://www.ncb.org.uk/resources-publications/no-good-options-report-inquiry-childrens-social-care-england> Accessed October 2020.

Cooper, K. and Stewart, K. (2017) 'Does Money Affect Children's Outcomes? An update'. <http://sticerd.lse.ac.uk/dps/case/cp/App2.pdf>. Accessed October 2020

Department for Education (2018) *Children in need census 2018 to 2019 Guide for local authorities*. London: Department for Education. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/744185/CIN18-19\\_Guide\\_v1.2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/744185/CIN18-19_Guide_v1.2.pdf) Accessed October 2020.

Department for Education. (2019). *Characteristics of children in need: 2018 to 2019*. London: Department for Education. Retrieved from: <https://www.gov.uk/government/statistics/characteristics-of-children-in-need-2018-to-2019> Accessed October 2020

Department of Health. (1995). *Child Protection: Messages from Research*, London: HMSO.

Ellison, R., & Renton, Z. (2018). *Storing up trouble - a postcode lottery of children's social care*. London: All Party Parliamentary Group on Children. <https://www.ncb.org.uk/storinguptrouble> Accessed October 2020.

Facompré, C. R., Bernard, K., & Waters, T. E. (2018). Effectiveness of interventions in preventing disorganized attachment: A meta-analysis. *Development and Psychopathology*, 30(1), 1-11.

\*Fuller-Thomson, E., Sawyer, J. L., & Agbeyaka, S. (2019). The toxic triad: Childhood exposure to parental domestic violence, parental addictions, and parental mental illness as factors associated with childhood physical abuse. *Journal of Interpersonal Violence*, 1-20.

\*Garstang, J. J., & Sidebotham, P. (2019). Qualitative analysis of serious case reviews into unexpected infant deaths. *Archives of Disease in Childhood*, 104(1), 30-36.

Gilbert, N. (2011). A comparative study of child welfare systems: Abstract orientations and concrete results, *Children and Youth Services Review*, 34(3), 532–536.

Hegarty, K., Bush, R., & Sheehan, M. (2005). The Composite Abuse Scale: Further development and assessment of reliability and validity of a multidimensional partner abuse measure in clinical settings. *Violence and Victims*, 20(5), 529–547.

\*Hood, R., Goldacre, A., Gorin, S., Bywaters, P., & Webb, C. (2020). Identifying and understanding the link between system conditions and welfare inequalities in children's social care services. [https://www.healthcare.ac.uk/wp-content/uploads/2020/04/System-conditions-and-inequalities\\_Full-report\\_Final\\_March-2020.pdf](https://www.healthcare.ac.uk/wp-content/uploads/2020/04/System-conditions-and-inequalities_Full-report_Final_March-2020.pdf) Accessed October 2020

Jones, R. (2014) *The story of Baby P: setting the record straight*. Bristol, U.K. : Policy Press. 339p. ISBN 9781447316220

Lacey, R. E., Howe, L.D., Kelly-Irving, M., Bartley, M. and Kelly, Y. (2020) 'The Clustering of Adverse Childhood Experiences in the Avon Longitudinal Study of Parents and Children: Are Gender and Poverty Important?', *Journal of Interpersonal Violence*, pp. 1–19. doi: 10.1177/0886260520935096.

Lacey, R. E. and Minnis, H. (2020) 'Practitioner Review: Twenty years of research with adverse childhood experience scores – Advantages, disadvantages and applications to practice', *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 61(2), pp. 116–130. doi: 10.1111/jcpp.13135.

Monroe, S. M., & Simons, A. D. (1991). Diathesis–stress theories in the context of life stress research: Implications for the depressive disorders. *Psychological Bulletin*, 110, 406–425.

Morris, K., Mason, W., Bywaters, P., Daniel, B., Featherstone, B., Mirza, N., Brady, G., Bunting, L., Scourfield, J., Hooper, J., & Webb, C. (2018). Social work, poverty and child welfare interventions. *Child & Family Social Work*, 23(3), 364–372.

Radford, L. *et al.* (2013) 'The prevalence and impact of child maltreatment and other types of victimization in the UK: findings from a population survey of caregivers, children and young people and young adults.', *Child abuse & neglect*. Elsevier Ltd, 37(10), pp. 801–13. doi: 10.1016/j.chiabu.2013.02.004.

\*Rose, W. and Barnes, J. (2008). *Improving safeguarding practice: study of serious case reviews 2001–2003*. London: Department for Children, Schools and Families.

Rothwell, D. W., & de Boer, K. R. (2014). Measuring economic hardship in child maltreatment research: Evidence from Canada. *Child Indicators Research*, 7, 301–320. doi.org/10.1007/s12187-013-9222-6

Sidebotham, P. (2019). Toxic terminology. *Association of Child Protection Professionals*. <https://www.childprotectionprofessionals.org.uk/blog/toxic-terminology>. Accessed October 2020.

\*Sidebotham, P., Brandon, M., Bailey, S., Belderson, P., Dodsworth, J., Garstang, J., ... Sorensen, P. (2016). *Pathways to harm, pathways to protection: a triennial analysis of serious case reviews 2011 to 2014: Final report*. Department for Education.

\*Simkiss, D. E., Spencer, N. J., Stallard, N., & Thorogood, M. (2012). Health service use in families where children enter public care: a nested case control study using the General Practice Research Database. *BMC Health Services Research*, 12, 65.

Sinclair, R., & Bullock, R. (2002). *Learning from Past Experience - A Review of Serious Case Reviews*. London: Department of Health.

Slack, K. S., Berger, L. M. & Noyes, J. L. (2017). Introduction to the special issue on the economic causes and consequences of child maltreatment. *Children and Youth Services Review*, 72, 1–4.

Tholen, B. (2018) Bridging the gap between research traditions: on what we can really learn from Clifford Geertz, *Critical Policy Studies*, 12:3, 335-349, DOI: 10.1080/19460171.2017.1352528

Tutty, L. M., & Nixon, K. (2020) Mothers abused by intimate partners: Comparisons of those with children placed by protective services and those without. *Children and Youth Services Review*, 115. [www.doi.org/10.1016/j.childyouth.2020.105090](https://doi.org/10.1016/j.childyouth.2020.105090)

Velleman, R., & Orford, J. (2001) *Risk and Resilience: Adults who were the Children of Problem Drinkers*. Amsterdam: Harwood Academic Publishers.

Wastell, D., & White, S. (2017). *Blinded by Science: Social Implications of Neuroscience and Epigenetics*. Bristol: policy Press.

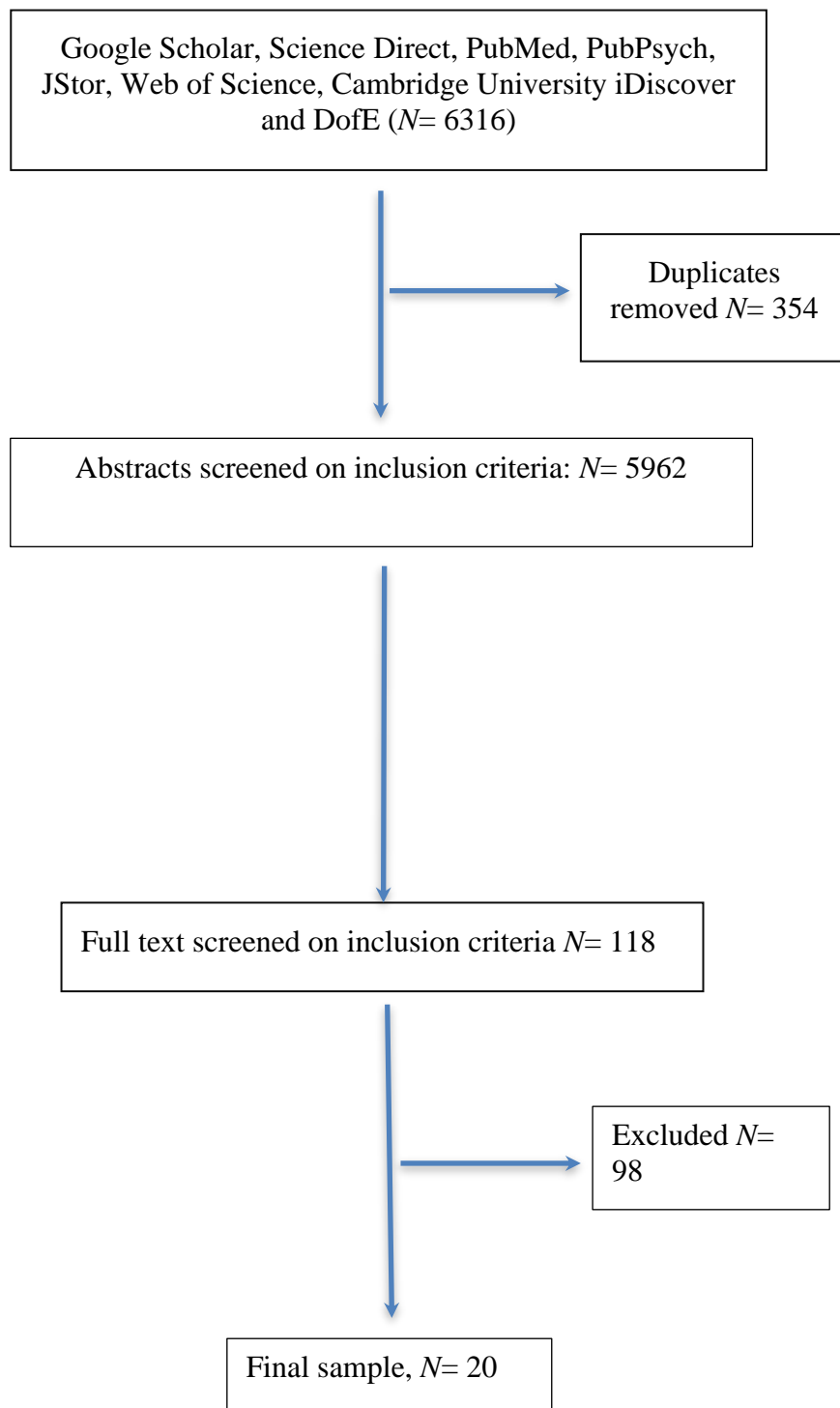
Webb, C., Bywaters, P. Scourfield, J., McCartan, C., Bunting, L., Davidson, G. and Morris, K. (2020) Untangling Child Welfare Inequalities and the 'Inverse Intervention Law' in England. *Children and Youth Services Review* online <https://doi.org/10.1016/j.childyouth.2020.104849>

Webb, C., Bywaters, P. Scourfield, J., Davidson, G. and Bunting, L. Cuts both ways: ethnicity and the social gradient in child welfare interventions *Children and Youth Services Review*. 9/8/2020 <https://doi.org/10.1016/j.childyouth.2020.105299>

\*Whitaker, R. C., Orzol, S. M., & Kahn, R. S. (2006). Maternal mental health, substance use, and domestic violence in the year after delivery and subsequent behavior problems in children at age 3 years. *Archives of general psychiatry*, 63(5), 551-560.

Wolfe, D.A., Crooks, C.V., Lee, V., et al. (2003). The Effects of Children's Exposure to Domestic Violence: A Meta-Analysis and Critique. *Clin Child Fam Psychol Rev*, 6, 171–187.

\*Woodcock, J., & Sheppard, M. (2002). Double trouble: Maternal depression and alcohol dependence as combined factors in child and family social work. *Children & Society*, 16, 4, 232–245.



**Figure 1. Flow diagram of searches.**

**Table 1. Systematic Review Evaluation Criteria**

<b>Criteria</b>	<b>Explanation</b>
<b>1. Clear and consistent definitions of the variables</b>	Are clear definitions provided for the key terms (mental health, domestic violence, substance use and learning disability)? For example, is mental health described in terms of clinical diagnosis or self-report, at what age and for how long has the child been exposed to the illness; how severe is the illness, is the illness treated or untreated?
<b>2. Clear and comprehensive data about the population affected</b>	Are demographic details of the child population studied provided? For example, are age, gender, ethnicity and disability clearly reported and explored in analysis; how is the issue of sample representativeness considered for the range of children and environments?
<b>3. Clear and relevant outcome measures</b>	What outcome measures are chosen and how are they relevant? For example, do measures of parental factors focus on parents’ capacities, behaviour or parenting practices? Are child outcomes outlined precisely? Does the study use validated assessment tools and measures?
<b>4. Clear theoretical framework</b>	Is there a clear theoretical framework to explain the link between the variables studied and the outcomes under investigation? For example, how is a connection between parental experience or behaviour and child outcomes understood? Is the study clear about whether factors act cumulatively or interact with one another?
<b>5. Appropriate and standardized statistics</b>	Does the study use appropriate statistical analysis to investigate associations between variables? Has the study reported effect sizes?
<b>6. Control for contextual or confounding factors</b>	Does the study consider and control for other possible factors? For example, are other factors in the child life (such as illness or disability), in the family (such as their command of socio-economic resources) or in their environment (such as the availability of supportive local resources or services) taken into account and controlled for?
<b>7. Intersectionality</b>	Does the study adequately consider the interaction of issues of demography, identity and social position in parents as well as in children? Are results for a particular sub-section of children inappropriately generalised to others?
<b>8. Policy context</b>	Is the evidence drawn on relevant to the context in which conclusions are applied? For example, are studies based in countries with different legal and welfare systems, or at different periods of time, applicable to the relevant national context?