

# Understanding Child-to-Parent Domestic Abuse

*A Dynamic Typology of Police Reported Cases*

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*A report by:*

***University of Central Lancashire***

*In partnership with:*

***i-three Analytics &  
Lancashire Constabulary***

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Criminal Justice  
Partnership



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police and communities together



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## Executive Summary

Within the UK, increasing house prices, decreased job security, reductions in welfare support, and increases to student loans are all resulting in young people living at home with their parents for longer (Stone et al., 2011). The Office for National Statistics (ONS) Labour Force Survey illustrates a one-third rise in the number of people aged 20-34 years living with their parents since 1996. In the year ending March 2020, this equated to 28% of people within this age group sharing a home with their parents, grandparents, or step-parents (ONS, 2021). The impact of these greater economic difficulties is that it is likely to increase tensions amongst younger adults living in the family home or insecurely housed with their parents or carers, which in turn increases the risk of Child to Parent Domestic Abuse (CPDA). This is particularly worrisome given how little scientific and policy focus has been given to the subject. As more recent literature begins to bring parent abuse to the fore (Condry et al., 2020; Simmons et al., 2017; Retford, 2016; Holt, 2012; Hunter & Nixon, 2012), difficulties begin to arise in establishing the extent, remit, dynamic and hence appropriate response to the issue (Holt, 2013). In this report we will use the term Child and Adolescent to Parent Violence and Abuse (CAPVA) (Brennan et al., 2022) when referring to research which includes perpetrators under 18 years old. However, the remit of this report is the subject of child to parent domestic abuse (CPDA) which focuses on abusive behaviour from offspring who are aged 16 years or older and are, therefore, captured by the statutory definition of domestic abuse.

This report examined 101,520 cases of domestic abuse responded to by Lancashire Constabulary between 28<sup>th</sup> November 2018 and 27<sup>th</sup> November 2021. By focusing on the 9,544 (9.4%) cases of CPDA, the report is able to present several critical findings that provide insight into the extent of, and dynamics within, CPDA. Findings suggest the need for widespread change to assessments and interventions to holistically address CPDA. The sheer volume of cases of CPDA suggests that there is a need for public-facing awareness campaigns to increase recognition of CPDA victimisation and perpetration from older offspring. This is needed as previous literature has largely situated CPDA as an issue for parents and carers of younger children (Holt, 2013). However, cases that involve law enforcement demonstrate this is a relational issue rather than one of age that naturally decreases over time. In line with expectations consistent with family demographics in England most incidents of CPDA involved

blood relatives of child to parent. Although sons formed the majority of offenders, research in population samples has found no difference between males and females in terms of being a perpetrator or victim of CAPVA (Simmons et al, 2017), suggesting incidents involving female perpetrators and/or male victims are underreported and/or more likely to be 'no further actioned'. It is likely that similar biases and barriers are present in CPDA as are in Intimate Partner Violence (IPV). This includes victims not recognising they are being victimised, as well as relatives and law enforcement not recognising the behaviour of female perpetrators, and/or not considering the experiences of male victims as 'real' DA incidents. In relation to victimisation, awareness should also focus on crime harm. Whilst assault with injury may not present as the most prevalent type of abuse, it produces the highest levels of harm. Taking account of crime harm, as opposed to raw counts has important implications for victimology, since it was identified that male victims of CPDA suffered the same levels of harm as female victims. Therefore, CAPVA and CPDA needs a critical approach into how it approaches protections and responses to fathers, grandfathers, and male guardians, as well as mothers, grandmothers, and female guardians.

The data was analysed using cluster analysis and identified four clusters. Due to the lack of typology research in CAPVA/CPDA the project team drew from IPV typology research to guide cluster interpretation. Case file analysis was applied at the end point to explore the validity of the cluster interpretations. The analysis suggested four types that could be framed largely around existing IPV typologies by Holtzworth-Munroe & Stuart (1994) and Johnsons' (1995) typology. Cluster 1 appeared most similar to Holtzworth-Munroe & Stuart's generally violent perpetrator. Cluster 2 appeared to fit Johnson's intimate terrorist perpetrators. Cluster 3 appeared to represent non-traditional cases such as male victims and/or female perpetrators. Finally, cluster 4 appeared to represent a form of Holtzworth-Munroe & Stuart's dysphoric perpetrator whose behaviour is driven by psychopathology and substance use. Contextualising the clusters with casefile information suggested complexity, psychopathology, multiple needs, and adversity. This suggests intervention approaches need to be family wide and multifaceted.

On the whole, the research found that CPDA cases are often a small window into a large and complex system of needs for many families across Lancashire. Due to the depth of the

statistical analysis and follow up contextualisation through analysis of police case files, the team found that abusive children (from 16 years and older) often had issues with mental health, had suffered serious neglect in childhood, had suffered (or had been exposed to) physical, emotional and sexual abuse, or had criminal behaviour modelled by their parent(s). Furthermore, some cases of CPDA involved perpetrators who were part of a large network of trauma and crime, with the largest of these containing 118 individuals and involving harm to 105 victims. The findings illustrate how a policing sample of CPDA includes serious cases and higher harm individuals, where there is a need for police and other service providers to develop policies and procedures for recognising complex instances of CPDA and coordinate multi-agency responses. Indeed, CPDA may be an important opportunity for the police to engage with these young people becoming involved in serious and/or organised crime by supporting them to desist in CPDA which is likely to be a behaviour that they do not wish to continue and one that provides them with no tangible rewards. Research also suggests that parental closeness to offspring is a protective factor in assisting offspring in desisting from crime (Copp et al., 2020) and therefore effective interventions have the capacity to reduce non-CPDA crime. The presence of Adverse Childhood Experiences (ACEs) in the lives of CPDA suspects suggests that the issue should be addressed through a trauma-informed, rather than a purely criminal justice, lens. Unlike most crimes, victims and perpetrators have a lifetime (the former) or extensive (the latter) involuntary relationship. These relationships are not easily disentangled or terminated, meaning incidents of CPDA are unique and require a different approach to other forms of crime, even intimate partner abuse (Brennan et al., 2022). What's more, whilst the frequency of ACEs in this sample is high, it is certainly an underestimate of the true level, range, and severity of the ACEs in the lives of the suspects, parents/carers, and other family members (such as siblings) who are often involved and or witness to CPDA. Therefore, a public health approach would be most appropriate in tackling CPDA, as its causes are within the individual, the family, the neighbourhood, and the county.



## Introduction

The Domestic Abuse Act 2021 gained royal assent on 29<sup>th</sup> April 2021 and establishes a clear definition of domestic abuse under section 1. This definition stipulates, under section 1(2), that domestic abuse is when persons A and B are aged 16 years or older, are personally connected to each other, and the behaviour is abusive. Abusive behaviour is considered as any (a) physical or sexual abuse; (b) violent or threatening behaviour; (c) controlling or coercive behaviour; (d) economic abuse; or (e) psychological, emotional, or other abuse under section 1(1).

However, under section 2 of the Act, the definition regarding personal connection provides little detail on family abuse relationships. Whilst there is explicit provision concerning the personal connection between those engaged in partner related abuse, there is little definition concerning the relationships involved in family abuse, other than 'they are relatives' under section 2(1)(g). The lack of explicit provision within the legislation may be reflective of how the primary focus in domestic abuse is that between partners, with other facets often under-represented in academic research and policy. This is despite these dynamics still making up a substantial proportion of the overall problem.

One specific area, and the focus of this report, is Child-to-Parent Domestic Abuse (CPDA). Simmons et al. (2018) illustrate how the area of study was first established 60 years ago with a 1957 paper examining whether childhood aggression was learned (Sears et al., 1957). Since then, there has been little scientific or cultural focus on CPDA which has resulted in a lack research and understanding regarding this dynamic of abuse (Home Office, 2021). As more recent literature brings CAPVA to the fore (Condry et al., 2020; Simmons et al., 2017; Holt, 2012; Hunter & Nixon, 2012), the need arises to better understand the prevalence, family relationships, and psychosocial factors so that it is accurately represented. Furthermore, procedures, initiatives, and interventions should be designed to address the known risk and need factors of CPDA families, with a range of pathways to represent the different presentations within this cohort.

Difficulties arise immediately with inconsistent terminology being used across academia, service providers, and formal frontline support services (Holt, 2013). One of the core difficulties is what we consider a "child" for the purposes of study. Whilst previous work

establishes CAPVA as an issue focused on those under the age of 18, this focus ignores those cases that meet the UK definition of domestic abuse. This difficulty occurs often because, as mentioned by Simmons et al., (2018), the term “child” is often used to denote the age of a person, rather than their role within an abusive family relationship. Unsurprisingly, further work by Simmons et al. (2022) found that aggression and abuse towards parental figures from a child continued through childhood and into adulthood. Due to a variation in approach, the area of study has seen various uses of terminology, including: ‘parent abuse’; ‘battered parents’; ‘adolescent to parent abuse’; ‘child to parent abuse’; and ‘adolescent aggression’ (Respect UK, 2021; Condry et al., 2020). Adding to this complexity is the way that abuse is interpreted and operationalised in the context of the research. Whilst some research may focus on child to parent ‘violence’ (Simmons, 2017), other work can include an array of behaviour and use different methods to study the topic. This then results in an inability to generalise results and understand the full extent of the issue (Holt, 2012; Hunter & Nixon, 2012).

### ***CPDA: A Growing Problem?***

The lack of scientific and policy focus on CPDA has become increasingly problematic due to the demographic changes within Western societies. This is because, especially within the UK, increasing house prices, decreased job security, reductions in welfare support, and increases to student loans could all be contributory factors to young people living at home with their parents for longer (Stone et al., 2011). Consequently, the Office for National Statistics Labour Force Survey illustrates a one-third rise in the number people aged 20-34 years living with their parents since 1996. In the year ending March 2020, this equated to 28% of people within this age group sharing a home with their parents, grandparents, or step-parents (ONS, 2021). Furthermore, given the increase in the proportion of older adults and increases to families in caregiving relationships with elders (Schiamber & Gans, 2000), understanding CPDA in older adults and within a family care setting has also been an under-researcher topic of domestic abuse.

Whilst the ONS can provide an overview of general demographic trends, it falls short on providing clear insights into the prevalence of CPDA. Whilst the national body collects figures

relating to domestic abuse, the data is simply split into intimate partner abuse and family abuse. When further considering that the recording of suspect-victim relationship is not a mandatory field for police data collection, the barriers involved in understanding and measuring CPDA become clearer.

Despite the difficulty in measurement, frontline service providers estimate that up to 3% of the population, or 10% of families, in the UK experience CPDA (Parental Education Growth Support: PEGS, 2021). It is estimated that as part of these incidents, over 90% of parents experience verbal abuse, 88% experience physical abuse, and just under 90% suffer property damage. With regards to only adolescent-to-parent abuse (those under 18 years), further investigation by the BBC (2019) demonstrated a doubling in the rate of this abuse across 19 forces over a three-year period between 2015-2018. The comparable data from the 19 police forces illustrated an overall increase from 7,224 incidents in 2015, to 14,133 incidents in 2018.

Evidence is also inconclusive regarding the prevalence of CPDA during the pandemic. Whilst police data may not evidence a rise during lockdown, it is important to note that this could reflect a lack of reporting. Whilst under-reporting is a critical issue in CPDA generally, due to victim fear, blame, criminalising their child, losing their child and siblings to care, lack of awareness of the abuse and who to turn to for help, and previous poor engagement from services, the pandemic may have exacerbated difficulties in victims seeking help. A recent study examining CPDA during the COVID-19 lockdown (April – June 2020), using an online survey methodology, illustrated an increase in CPDA frequency and severity during the lockdown period (Condry et al., 2020). However, it also found that the trends within the police data provided inconclusive results. Data was collected from 104 parents who had experienced CPDA, 47 practitioners who work directly with families, and cases from 19 police forces who responded to the FOI. Their work found that: 70% of parents reported an increase in violent episodes during lockdown; 69% of practitioners said there had been an increase in referrals for families experiencing CPDA; and 64% of practitioners reported the severity of violence had increased. Suggested reasons for the increased levels and severity of CPDA during lockdown included: spatial confinement and proximity, changes in structure and routine, fear and anxiety, and a lack of access to formal support. It is also likely that the initial lockdown period interrupted drug supply chains, due to an increased risk of getting caught due to less citizens

outside and police attention being brought on those that were s in public locations was likely to have reduced the willingness of people to sell and move illegal drugs (Barratt & Aldridge, 2020). Consequently, difficulties in the purchasing of drugs may have resulted in addicted offspring suffering the effects of withdrawal or having to pay higher prices for drugs. These effects are likely to have been acute initially but then supply chains will also certainly eased as people adapted to the 'new normal' and those supplying the UK's illegal drug market changed their business model and supply chain.

Previous literature reviewing 60 years of CAPVA examines prevalence across sampling type as well as gender (Simmons et al, 2017). Research within community or clinical samples of physically violent adolescent CPDA perpetration found rates between 5% (Calvete et al., 2013) and 22% (Margolin & Baucom, 2014) with no significant difference between males and females. In the same population samples, findings regarding non-physically violent CPDA indicate girls tend to display more behaviour that could be regarded as coercive control towards parents when compared to boys (Calveet et al., 2013; 2015). However, this is not translated through to offender samples where males generally account for between 59%-87% of perpetrators. This disparity in gender across community samples vs offender samples could be reflective of similar gender biases that occur in intimate partner abuse, where biases can impact upon reporting, the arrest decision, and sentencing outcome (Simmons et al., 2017).

### ***Responding to CPDA***

The lack of a consistent definition of, and shared language around, CPDA makes it difficult for both service providers and victims to identify when such abuse is occurring (Holt, 2012). This is exacerbated by the fact that CPDA does not conform to preconceived notions about intra-familial violence, wherein abuse is assumed to be perpetrated by those with more power against those with less power (Cottrell, 2004; Holt, 2012). Parents are assumed to hold more power than children and, as such, the possibility that a child may be abusing a parent is, to many, inconceivable (Holt, 2012). These assumptions have shaped responses to abuse in the child-parent relationships, as the legislation, policies, and protocols that deal with this topic focus on safeguarding children from abuse, harm, and neglect by adult caregivers (Parton & Berridge, 2011). Safeguarding children in cases of CPDA is critically important, given that the

child themselves may have been victims of abuse or trauma previously, in addition to other vulnerabilities such as mental health and substance use disorders (Kennair & Mellor, 2007). Moreover, abusive children are at risk of becoming adult perpetrators of domestic abuse and engaging in further criminal behaviour (Cottrell, 2004; Retford, 2016).

However, it is equally important to recognise abuse towards parents and guardians, and how these victims may be particularly and in need of safeguarding from harm. As such, the current emphasis on child safeguarding has several implications for the recognition, reporting and response around CAPVA. First, it can lead parents to conceal the abuse because they are afraid of being blamed, disbelieved, or penalised. The fear of being labelled a 'bad parent' can be further exacerbated by the child perpetrator (especially when under the age of 18), who may respond to attempts at discipline or restraint by threatening to call child protection services (Price, 1996; Cottrell & Monk, 2004) this type of abuse is called legal and administrative abuse in the IPV literature (Hines et al., 2015) and is effective when the narrative around an offence is framed in such a way that only certain victims are recognised as legitimate. Second, when parents do raise the alarm, some service providers can find it difficult to reconcile child safeguarding principles with the idea of a child perpetrator (Holt & Retford, 2012; Nixon, 2012). Such providers often reframe CAPVA as a behavioural problem or product of poor parenting, sometimes referring victims to counselling or parenting programs where the onus is on the parent to change their attitudes and behaviours to end the abuse (Holt, 2012). Whilst this is likely to be appropriate in many situations, it does not negate the need for the perpetrator to also address their abusive behaviour. Without the latter, parents are not only blamed for their own abuse (thereby confirming their initial fears), but also burdened with the responsibility of stopping it. Third, CAPVA is often omitted from policy and practice documents that govern the provision of services to abuse victims. As such, even when service providers do recognise CPDA, they can see it as being beyond their remit, or struggle to find suitable responses within the boundaries of their roles (Cottrell & Monk, 2004; Holt & Retford, 2012; Nixon, 2012).

Attempts to find suitable responses are further complicated by the fact that parents are legally responsible for their children as they progress through childhood and adolescence. As a result, many of the approaches used to address other forms of intra-familial violence are

unsuitable for responding to CPDA when the child is an adolescent. Abused parents who attempt to leave the home, for example, can face prosecution for child abandonment (Nixon, 2012). Similarly, those who turn to the criminal justice system for help may be subjected to Parenting Orders, which may make them feel they are being held solely responsible for the behaviour of their children and even place them at risk of prosecution if this behaviour does not improve (Goldson & Jamieson, 2002; Holt, 2009).

Although researchers in this area frequently take a position of protecting the 'victim' and holding the 'perpetrator to account' (e.g., Cottrell (2004) arguing that the lack of provision for parents with abusive children enables CAPVA and reinforces the notion that the behaviour has few consequences, resulting in an increased risk of the child becoming an adult domestic abuse perpetrator), this is not a model that should be applied to CAPVA or CPDA. Such a model demonises the perpetrator which is unhelpful and inconsistent with intervening effectively in family relationships. Family based approaches such as the Family Process Triadic Model (Schleider & Weisz, 2017) are likely to be more appropriate and can include all family members.

Currently then, there is a clear need to fill the policy gap surrounding CPDA and to do so in a manner that accounts for its unique challenges and complexities. This will require the development of local and national policies that aim to support parent victims and other family members without stigma and judgement. These policies need to assist service providers in recognising CPDA by explicitly defining it, describing the varied ways in which it can manifest, and how to appropriately respond and empower victims (Holt, 2012; Retford, 2016) and their families. The policies should also enable providers who do recognise CPDA to connect perpetrators and victims to appropriate support services (Howard & Rottem, 2008; Holt & Retford, 2012; Miles & Condry, 2015). Given the complex nature of CPDA, it is probable that these services will need to be provided by several different agencies working in tandem (Howard & Rottem, 2008; Holt, 2012; Miles & Condry, 2015; Retford, 2016). As a result, policies should also contain guidance on coordinating a multi-agency response: this might include information on how to identify appropriate agencies, develop support plans, and assign roles and responsibilities (Holt, 2012; Retford, 2016). It might also include a

requirement to assign a lead agency to coordinate the response and serve as a single point of contact for families (Retford, 2016).

Developing local and national policies for reporting and responding to CPDA has several potential benefits. First, it would educate families, the general public, and service providers about CPDA and the support available to those experiencing it. This could result in better recognition and reporting which, together with improved signposting and referral, would create more opportunities for service providers to intervene and disrupt CPDA (Cottrell, 2004; Howard & Rottem, 2008; Retford, 2016). It could also contribute to a greater awareness of the extent of the problem, which would assist abused parents to feel less isolated (Kennair & Mellor, 2007; Holt, 2012) and service providers to allocate sufficient resources to respond to it (Retford, 2016). Second, establishing multi-agency partnerships could allow information and resources to be pooled across agencies: this would have the dual benefit of enhancing the design and delivery of interventions and highlighting current knowledge gaps (Cottrell, 2004; Holt, 2012; Retford, 2016). Finally, a greater awareness of CPDA and the current knowledge gaps could lead to an upswing of interest in this understudied topic among academic researchers (Baker, 2012; Condry & Miles, 2013; Retford, 2016). This is important, given that policy design and implementation need to be underpinned by research that considers which interventions are effective in addressing CPDA and under what circumstances. To date, most interventions have been developed by agencies working in isolation, often within limited budgets that do not allow for rigorous evaluation (Holt, 2012). As a result, although there are a number of interventions available (with varied theoretical bases, goals, components, lengths, and schedules), it is unclear which of these are most effective in addressing CPDA (Holt, 2012). There are, however, some elements of intervention that have been identified by academics, practitioners, and participants as important to their success. Critically, interventions need to be tailored to individual families, for example through the use of assessments that unpack the abuse dynamics and the needs of perpetrators, victims and other family members such as siblings (Howard & Rottem, 2008; Holt, 2012; Retford, 2016). Providers delivering interventions should also avoid explicit or implicit attributions of blame and instead build trust through an empathetic non-judgemental attitude (Gallagher, 2004; Kennair & Mellor, 2007; Holt, 2012; Retford, 2016). Researchers have indicated that interventions themselves need to include education about appropriate

and inappropriate conduct, behaviour training to reassert parental authority and control (whilst minimising conflict), and communication training to rebuild relationships (Micucci, 1995; Monk & Cottrell, 2006; Kennair & Mellor, 2007). Whilst this may be appropriate for the younger suspects of CAPVA, when attempting to address CPDA it is likely that families require a more extensive range of trauma-informed and trauma-responsive interventions. These interventions are likely to need to include mental health, emotional resilience, conflict management and relationship enhancement components as the evidence from the previous report (Graham-Kevan et al., 2021) highlighted the complex nature of CPDA. Finally, providers should attempt to engage both children and parents in treatment to maximise its potential benefits (Cottrell, 2004; Gallagher, 2004).

### **Summary**

Notwithstanding the complexity of CPDA across public understanding, academia, and service provision, as well as an apparent under-reporting of the CPDA, positive steps are being made to better understand and respond to this form of domestic abuse. To place this report into context, the work takes note of the Home Office Draft Statutory Guidance Framework (Home Office, 2021; 20-22) which provides guidance and detail on CPDA and the variety of situations it encompasses. To begin addressing the complexity involved in this one facet of domestic abuse, the current project aims to use police data to begin forming a more nuanced picture of CPDA cases and the behaviours involved and further refining the CPDA typology (Graham-Kevan et al, 2021). To achieve this overall aim, the work concerns: an updated CPDA systematic literature review; the formation of a dynamic CPDA typology, diagnostics on the stability and changes to 'types' over time, a follow-up psychological contextualisation of the typology, and a more detailed examination of the highest harm offenders. Overall, the contextualised typology would result in a more detailed framework from which police practitioners and service providers can begin to build a response to CPDA.



## Child-to-Parent Domestic Abuse – A Systematic Literature Review

Domestic abuse (DA) related incidents include reports of physical violence, threatening behaviour, as well as psychological, sexual, financial, coercive or emotional abuse between adults, aged 16 years and over, who are or have been intimate partners or family members, regardless of their gender or sexuality (UK Office for National Statistics [ONS], 2019). Apart from coercive behaviour, DA is not a specific criminal offence but a criminal act between family members. Although DA has become synonymous with intimate partner violence (IPV), it also includes offences committed by children aged 16 years or older that are directed at their parents/carers (Holt & Lewis, 2021), referred to as 'parents' in this paper for ease but includes all carer roles (e.g., parents, grandparents and foster parents). CPDA is believed to result from the desire of a child to gain power over their parents by employing abusive behaviours to instil fear or cause financial, physical, or psychological harm (Ilabaca Baeza & Gaete Fiscella, 2021). This definition, however, is overly simplistic and pejorative, does not address the complexity of CPDA or the psychological and contextual factors that may help understand it.

CPDA can involve a range of behaviour, including physical violence, damage to property, coercive control or emotional, sexual and financial abuse (Holt & Lewis, 2021). These behaviours may create a power imbalance that further endangers the parent at risk and others within the family. Despite this risk, many parents experience feelings of guilt and shame, which are believed to contribute to underreporting of CPDA (Ilabaca et al., 2021). In turn, underreporting by parents may have contributed to the lack of research into this specific type of family violence compared to other types, such as parent-to-child abuse and IPV (O'Hara, Duchschere & Beck et al., 2017).

Research findings have evidenced diversity in terms of CPDA type, with some showing patterns of coercive control. In contrast, other types of CPDA appear more explosively episodic, consistent with the literature on IPV. Research by Miles and Condry (2015) identified a range of dynamics in households where children abused their parent/s, including a history of exposure to IPV between parents, issues stemming from the child's behavioural problems, mental health difficulties, and substance abuse. That said, research has also highlighted the relationship between IPV and CPDA, with CPDA perpetration being predictive for subsequent

IPV perpetration (Fernández-González, Orue & Adrián, et al., 2021). For these reasons, it is vital to explore whether there are distinct profiles or 'types' of perpetrators of CPDA, which, if found, would suggest a need for greater specificity in research and different intervention and treatment pathways for practitioners.

Although CPDA is a growing research topic, most reports and publications focus on younger children. While this has provided some insights into CAPVA/CPDA, older perpetrators are likely to differ in the nature of their abuse. For example, CPDA may be more likely to be financially related and associated with a greater risk of physical harm, particularly where children act as carers for victims who are more vulnerable due to disability or older age. Although CPDA typically follows a trajectory, whereby abuse peaks when the perpetrator is around 15 years of age (Calvete, Orue, Fernández-González et al., 2020), parent-child relationships change throughout the lifecycle, as do sources of conflict and subsequent risk (Condry, Miles, Brunton-Douglas et al., 2020). However, there are currently no studies investigating the developmental course of CPDA in adulthood (Calvete et al., 2020). Therefore, it is currently unknown whether this trajectory continues into adulthood, peaks, plateaus, or declines.

There is currently limited knowledge regarding perpetrators of CPDA and less about their victims. Although UK policy has aimed to address CPDA, it is significantly underreported by victims and remains a neglected area of research (Holt, 2011). Understanding the potential dynamics of families where CPDA occurs allows appropriate risk and needs assessments to be developed, and intervention approaches explored. Therefore, this review aimed to collate and synthesise empirical research findings on CPDA in terms of causes, drivers, and aggravating factors to gain a more comprehensive understanding of all the factors and dynamics involved.

## ***Process***

### ***Search strategy***

Data were sourced from five databases: Web of Science, Google Scholar, Embase, Medline, and PsycInfo. This combination of databases was selected to ensure that over 95% of

published articles were identified (Bramer, Rethlefsen, Kleijnen, et al., 2017). The last search was conducted on 09/02/2022. The search terms were generated from scoping searches and were intentionally kept broad to identify all potentially relevant studies. The following syntax was used: ("Child to parent" OR "child to mother" OR "child to father" OR "child to elder") AND (Abuse OR neglect OR maltreatment OR mistreatment OR aggress\* OR violence).

### ***Eligibility criteria***

From the potential articles produced by systematic research, studies were selected that included at least one form of CPDA, but to be eligible for inclusion, the perpetrators of abuse needed to have a minimum age of 16 or a sample mean age of 18 years or above, to allow age variance to be captured. The first exclusion of non-relevant studies was made by analysing titles and abstracts of articles. Subsequent screening of full-text articles permitted further selection. One researcher made the selections independently, and a second reviewer checked decisions. Conflicting decisions were resolved via the consultation of a third reviewer.

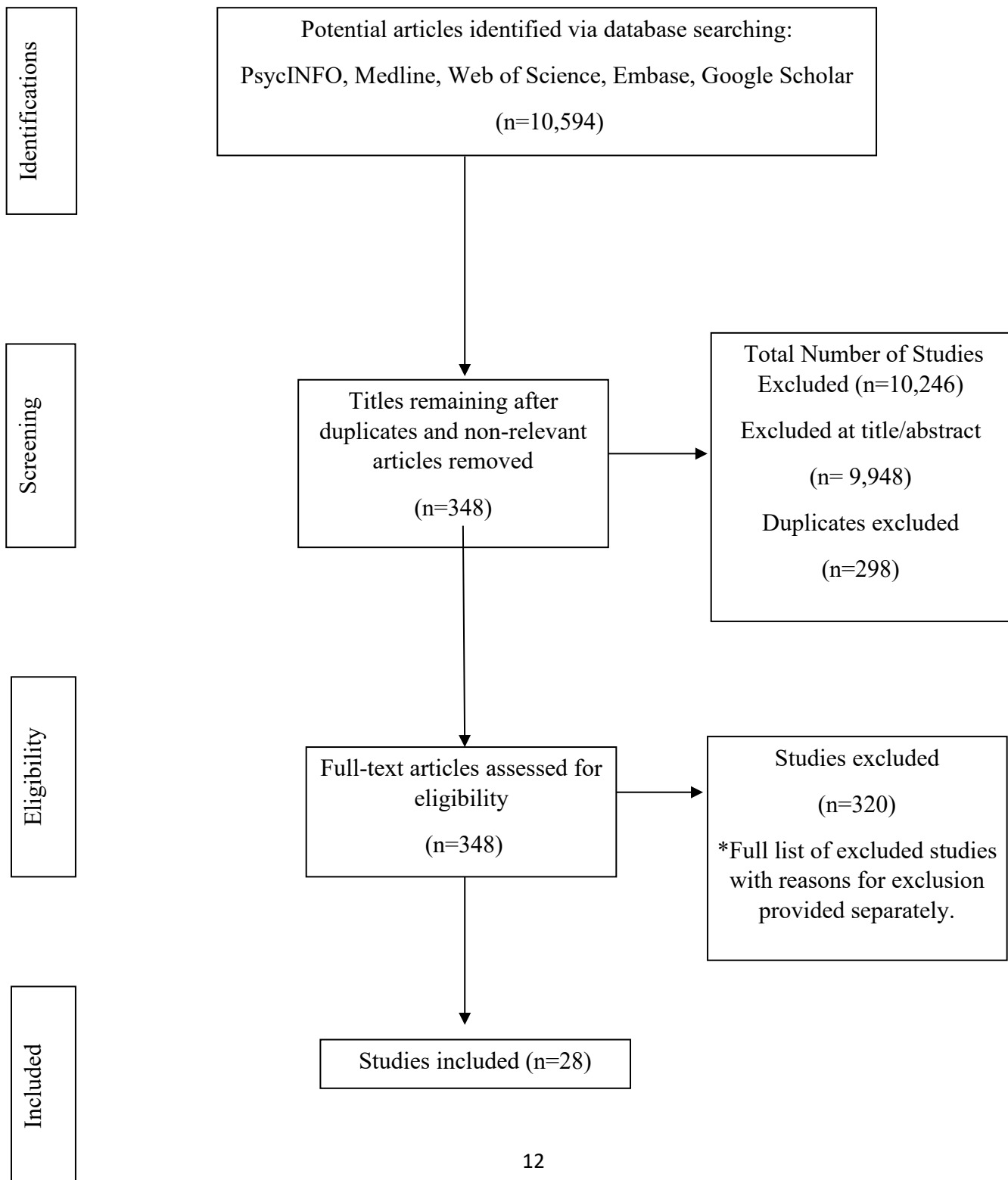
### ***Study selection***

A stepwise approach was utilised to identify eligible articles. Firstly, titles and abstracts were screened, and irrelevant and duplicate articles were excluded, as well as those that were not written in English and translations were unavailable. In the second step, a reviewer screened all the remaining full-text articles to identify the mean age of the perpetrators of abuse. All articles in which perpetrators were below age 16 or articles where only a mean, below 18, was given were excluded.

Searching of the databases yielded a total of 10,594 articles. After duplicates were removed, 10,296 articles remained. Subsequent screening of titles and abstracts resulted in the exclusion of a further 9,948 articles. The remaining 348 articles were then assessed for eligibility. Full-text screening of the remaining articles resulted in the exclusion of a further 320 articles, with the remaining 28 articles meeting the eligibility criteria for inclusion within the review.

A complete list of excluded articles during full-text screening with the reasons for their exclusion has been provided separately. All decisions were checked via consultation with a second reviewer. Once consensus was reached, a reviewer began the data extraction process.

Figure 1: Summary of the searching and screening process that was conducted in line with PRISMA guidelines (Page et al., 2020).



### ***Data collection***

Data were extracted from eligible articles in line with SPIDER principles, including information relating to sample, the phenomenon of interest, design, evaluation, and research type (Cook, Smith & Booth, 2012). As CPDA is a broad topic that encompasses a variety of abuse types, including verbal, physical, sexual, emotional, and financial abuse, the phenomenon of interest within the identified studies varies to some degree. For this review, the type of abuse perpetrated was the phenomenon of interest. In addition, the author(s), year, and country of publication were extracted.

Data about the perpetrator's characteristics were also extracted including, age, gender, ethnicity, substance use, mental illness, and information regarding any prior abuse they had experienced. However, the same information could not be extracted for victims due to the lack of available data. Where full-text articles had incomplete or missing data, the reviewer contacted the study's corresponding author via email to obtain this information. If no response was received, the study was excluded.

## ***Results***

### ***Study characteristics***

Twenty-eight studies were deemed eligible for inclusion within this review and were published between 1998 and 2022. Studies were conducted in various countries, two studies were conducted in the United Kingdom, (Browne & Hamilton, 1998; McManus, Almond & Bourke, 2017); three studies were conducted in America, (Rheaume, 2009; Labrum & Solomon, 2020; Smith, 2015); one study was conducted in Canada, (Lyons, Bell & Fréchette et al., 2015); three studies were conducted in Australia (Simmons, McEwan, Purcell & .Huynh, 2019a; Simmons, McEwan & Purcell, 2019b; Simmons, McEwan & Purcell, 2022) eight studies were conducted in Spain, (Gamez-Gaudix & Calvete, 2012; Gamez-Guadix, Jaureguizar & Almendros et al. 2012; Ibabe, Arnosó & Elgorriaga, 2020; Martín, Fariña, & Arce, 2020; Trull-Olivia & Soler-Maso, 2021; Cano-Lozano, Navas-Martínez & Contreras, 2021a; Cano-Lozano, León, & Contreras, 2021b; Cano-Lozano, León, & Contreras, 2022); three articles used Swedish samples (Johnson, Richert & Svensson, 2018; Svensson, Richert & Johnson, 2020; Johnson, Richert & Svensson, 2022); three studies were conducted in Taiwan (Hsu & Tu, 2013;

Hsu, Huang & Tu, 2014; Sun & Hsu, 2016); one study was conducted in South Africa (Moen & Shon, 2020); another study was conducted in Mexico (Sánchez, Tobón & Solís et al., 2019); one study was conducted in Japan (Kageyama, Yokoyama & Horiai et al., 2020); another study was conducted in Chile (Jimenez-Garcia, Contreras & Perez et al., 2020); one study was conducted in Argentina (de Veinstein, 2004).

Studies utilised diverse samples; thirteen studies recruited samples via university advertising; (Browne & Hamilton, 1998; Gamez-Gaudix & Calvete, 2012; Gamez-Gaudix et al., 2012; Ibabe et al., 2020; Jiminez-Garcia et al., 2020; Lyons et al., 2015; Rheaume, 2009; Sanchez et al., 2019; Simmons et al., 2019a; Simmons et al., 2019b; ; Cano-Lozano et al., 2021b; Cano-Lozano et al., 2022; Simmons et al., 2022). Three studies utilised clinical samples; from outpatient settings involving adult drug users and their parents (Johnson et al., 2018; Svensson et al., 2020; Johnson et al., 2022), whilst three studies recruited samples from hospitals (Hsu & Tu, 2013; Hsu et al., 2014; Sun et al., 2016). Three studies obtained samples from pre-existing datasets (McManus et al., 2017; Labrum & Solomon 2020; Moen & Shon, 2020). Two studies utilised young offender samples (Martín et al., 2020; Trull-Olivia & Soler-Maso, 2021). One study recruited samples from self-help groups for individuals with mental disorders and their family members (Kageyama et al., 2020). Another study recruited samples from an elder support network (Smith, 2015), and one employed an opportunity sampling method to obtain samples from the general population of Buenos Aires (de Veinstein, 2004). The final study used non-probability sampling within the general population (Cano-Lozano et al., 2021a).

There were no restrictions regarding research design. As a result, a variety of research designs were utilised; twenty-three studies used a cross-sectional design with self-report measures (Browne & Hamilton, 1998; de Veinstein 2004; Gamez-Gaudix & Calvete, 2012; Gamez-Gaudix et al., 2012; Hsu & Tu, 2013; Hsu et al., 2014; Ibabe et al., 2020; Jiminez-Garcia et al., 2020; Johnson et al., 2018; Lyons et al., 2015; Rheaume, 2009; Sanchez et al., 2019; Simmons et al., 2019a; Simmons et al., 2019b; Martín et al., 2020; ; Smith, 2015; Svensson et al., 2020; Cano-Lozano et al., 2021a; Cano-Lozano et al., 2021b; Trull-Olivia & Soler-Maso, 2021; Cano-Lozano et al., 2022; Johnson et al., 2022; Simmons et al., 2022). Two studies used a follow-up intervention program design (Sun & Hsu, 2016; Kageyama et al., 2020). Three studies used a

mixed-methods approach to analyse data (McManus et al., 2017, Labrum & Solomon 2020; Moen & Shon, 2020).

Studies included in this review considered various phenomena. Physical abuse was the phenomenon of interest in six studies (de Veinsten, 2004; Ibabe et al., 2020; Kageyama et al., 2020; Moen & Shon, 2020; Sun & Hsu., 2016; Trull-Olivia & Soler-Maso, 2021); in another, it was financial abuse (Johnson et al., 2018). Most studies investigated multiple abuse types. In ten studies, the phenomena of interest were physical and emotional abuse (Browne & Hamilton, 1998; Gamez-Guadix & Calvete, 2012; Gamez-Guadix et al., 2012; Labrum & Solomon, 2020; Lyons et al., 2015; Rheaume et al., 2009; Smith, 2015; Sánchez et al., 2019 ; Martín et al., 2020; Simmons et al., 2022). The phenomena of interest in two studies were physical, emotional, and financial abuse (Hsu et al., 2014; Hsu & Tu, 2013). In two further studies, the phenomena of interest were physical and financial abuse (Simmons et al., 2019a; Johnson et al., 2022). In one study, the phenomena of interest were physical, emotional, financial, and coercive abuse (Jimenez-Garcia et al., 2019). In one study, the phenomena of interest were physical, emotional, financial, and sexual abuse (McManus et al., 2017). In one study, the phenomena of interest were physical, emotional, and financial abuse (Svensson et al., 2020). Physical, emotional, coercive and financial (Cano-Lozano et al., 2021a; Cano-Lozano et al., 2021b; Cano-Lozano et al., 2022). Physical, emotional and coercive (Simmons et al., 2019b)

### ***Perpetrator characteristics***

Most studies reported the age of perpetrators; twenty-one studies reported the mean age of perpetrators (Cano-Lozano et al., 2021a; Cano-Lozano et al., 2021b; Cano-Lozano et al., 2022; Gamez-Guadix & Calvete, 2012; Gamez-Guadix et al., 2012; Hsu et al., 2014; Hsu & Tu, 2013; Jimenez-Garcia et al., 2020; Johnson et al., 2022; Kageyama et al., 2020; Labrum & Solomon, 2020; Lyons et al., 2015; Martín et al., 2020; McManus et al., 2017; Moen & Shon, 2020; Sánchez et al., 2019; Simmons et al., 2019a; Simmons et al., 2019b; ; Simmons et al., 2022; Smith, 2015; Sun & Hsu, 2016). Six studies did not explicitly report the age of perpetrators, but they stated that all 'participants' were over the age of 18 years old (Browne & Hamilton, 1998; de Veinsten, 2004; Ibabe et al., 2020; Johnson et al., 2018; Rheaume et al., 2009; Svensson et al., 2020). The remaining study reported the age range of perpetrators (Trull-

Olivia & Soler-Maso, 2021). That said, the gender of perpetrators of CPDA was reported in all but one study (Ibabe et al., 2020).

Although this review intended to extract data regarding the ethnicity of CPDA perpetrators, the majority of studies (n=19) did not report the ethnicity of perpetrators of CPDA, nine studies did (Kageyama et al., 2020; Labrum & Solomon, 2020; Lyons et al., 2015; Moen & Shon, 2020; Rheume et al., 2009; Sánchez et al., 2019; Simmons et al., 2019a; Simmons et al., 2019b; ). Data relating to the substance use of perpetrators of CPDA was extracted, although the majority of studies (n=20) did not report this information, eight studies did (Hsu et al., 2014; Hsu & Tu, 2013; Johnson et al., 2018; Johnson et al., 2022; Labrum & Solomon, 2020; McManus et al., 2017; Sun & Hsu, 2016; Svensson et al., 2020).

In terms of psychiatric conditions of CPDA perpetrators, only eight studies reported these (Cano-Lozano et al., 2021a; Hsu et al., 2014; Hsu & Tu, 2013; Johnson et al., 2018; Johnson et al., 2022; Kageyama et al., 2020; Labrum & Solomon, 2020; Sun & Hsu, 2016; Svensson et al., 2020). One additional study reported mental illness for perpetrators, but this data was amalgamated with substance use (McManus et al., 2017). That said, only nine studies explored CPDA perpetrators' previous experiences of abuse (Browne & Hamilton, 1998; Cano-Lozano et al., 2021a; de Veinsten, 2004; Gamez-Guadix & Calvete, 2012; Lyons et al., 2015; Martín et al., 2020; Moen & Shon, 2020; Rheume et al., 2009; Simmons et al., 2022).

## ***Discussion***

### ***Synthesis of finding***

Established literature has highlighted several factors that can drive a child to abuse their parent. Therefore, this review aimed to collate and synthesise empirical research findings on CPDA in terms of causes, drivers, and aggravating factors, to gain a comprehensive understanding of factors and dynamics involved. A qualitative synthesis of research findings consistently identified several factors and dynamics involved in CPDA, including family dynamics, psychopathology, methods of abuse, and perpetrator characteristics, including gender, age, substance use, perpetrator-victim relationship, and perpetrators' experiences of parent-to-child abuse.



Family dynamics were considered in most articles included in this review, with findings indicating that children learnt their abuse tactics from their parents (Browne & Hamilton, 1998; Gamex-Gaudix & Calvete, 2012; Gamex-Gaudix et al., 2012; Cano-Lozano et al., 2021a). Most children inflicted the same type of abuse towards their parents as their parents had inflicted towards them (Browne & Hamilton, 1998). For example, when parents were physically abusive towards their children, they also perpetrated physical abuse towards their parents. Explanations for this phenomenon consistently take a social learning stance within psychological literature, in that children learn to be abusive via the modelling of abusive behaviour exhibited by their parents (Browne & Hamilton, 1998; de Veinsten, 2004; Gamez-Gaudix & Calvete, 2012; Gamez et al., 2012; Ibabe et al., 2020; Lyons et al., 2015; Moen & Shon, 2020, Rheume et al., 2009). As a result, it is suggested that CPDA occurs when children learn abusive tactics from experiences of parent-to-child abuse or witnessing abuse between parents. Nevertheless, whilst it was evident that CPDA was likely to be a factor in families where the parent had previously been abusive towards their child, research tells us that the impact of abuse of children is neuropsychological and that early life stress impairs the development of risk-related neural processes, lessening the individual's ability to effectively evaluate the potential negative consequences of their behaviour (Masson, Bussi eres, East-Richard, Mercier & Cellard, 2015). Child abuse undoubtedly creates stress, as does family conflict, which has also been found to be a risk factor for subsequent CPDA perpetration (Gamez-Gaudix & Calvete, 2012; Ibabe et al., 2020). Even where conflict between parents is not overheard, even silent conflict tactics are significantly associated with an increased propensity for externalising behaviours in children (Hosokawa & Katsura, 2019).

Consistent with this research, studies that included parents' perspectives on the reasons for their child's abuse revealed that parents frequently blamed their parenting strategies (Hsu & Tu, 2013; Hsu et al., 2014; Smith et al., 2015). In violent families, both maternal and paternal trauma exposure can be transmitted to future generations. However, the intergenerational transmission of violence may be more strongly associated with mothers (L unnemann, Horst, Prinzie, Luijk & Steketee, 2019), supporting an intergenerational trauma-based explanation (Siverns & Morgan, 2019). This perspective has yet to be applied to CPDA. Irrespectively, it has been indicated that the power imbalance created by CPDA may instil these feelings in parents, hence facilitating and prolonging abusive behaviour (Ilabaca Baeza & Gaete Fiscella,

2021). In this regard, it could be suggested that CPDA becomes a repeated pattern of behaviour resulting from a combination of factors related to both the child and parent. However, research conducted by Simmons et al., (2019b) identified discrepancies between parents' perspectives of abusive behaviour and the perspectives of their children.

It was discovered that CPDA perpetrators relied on the physical outcome of their actions to determine abuse severity, whereas victims of CPDA noted psychological as well as physical harm (Simmons et al., 2019b). Therefore, it may be the case that psychological types of CPDA may not necessarily be considered as DA because the perpetrator is unaware of the effect of their actions on their parents. Therefore, it could be argued that in the case of emotional CPDA, the perpetrator is not seeking to exert power over their parents (Ilabaca Baeza & Gaete Fiscella, 2021). Rather, they may be seeking to relieve their own distress, albeit, at the expense of their parents, yet unwittingly. However, research is still needed to entirely understand the dynamics involved in this process. Nevertheless, the role of parenting styles consistently appeared within the literature on CPDA and so appeared to be an essential aspect of CPDA dynamics.

Where studies investigated the role of parenting styles, they generally found that the authoritarian parenting style, whereby a parent uncompromisingly enforces their ideas regardless of the will of the child (Brosnan, Kolubinski & Spada, 2020), was positively associated with verbal CPDA (Gamez-Gaudix & Calvete, 2012). Previous research supports the link between authoritarian parenting and aggression generally (e.g., Chen, Raine & Granger, 2018; de la Torre-Cruz, García-Linares & Casanova-Arias, 2014), but in the context of CPDA, research is currently limited. Parents that adopted a negligent parenting style in which parents were dismissive of their child's needs have been researched and found to increase the risk of physical and verbal abuse by both sons and daughters (Gamez-Gaudix et al., 2012). Therefore, parenting style appears a good candidate for further research into CPDA and, if these early findings are replicated, a viable target for intervention. That said, recent findings suggest that punitive disciplinary practices, including physical and psychological punishment, can contribute to the development of CPDA (Cano-Lozano et al., 2022). However, it was noted that the relationship between punitive discipline and CPDA was aggravated by several factors including, parental ineffectiveness, impulsivity and stress (Cano-Lozano et al., 2022).

Nevertheless, these factors were strongly related to the context in which the discipline was applied (e.g. parental stress) and how it was implemented (e.g. impulsive application) (Cano-Lozano et al., 2022). Therefore, it is evident that several family dynamics may interact in the development of CPDA. That said, although family dynamics seem to play a significant role in CPDA, several situational factors have also been highlighted within literature, such as the role of substance use.

From the available evidence, parents typically believed substance use to be a significant factor in their child's abusive behaviour (Hsu & Tu, 2013; Hsu et al., 2014; Johnson et al., 2018; Johnson et al., 2022; Svensson et al., 2020; Smith et al., 2015). That said, substance use by children has been linked to parenting style (e.g., Charoenwongsak, Kinorn & Hongsanguansri, 2017; Valente, Cogo-Moreira & Sanchez, 2017; Zuquette, Opaleye, Feijó, Amato, Ferri & Noto, 2019), and so these explanations are likely to be interactive rather than mutually exclusive. Regardless, most studies reported that CPDA perpetrators were currently using or had a history of using at least one substance (Hsu & Tu, 2013; Hsu et al., 2014; Johnson et al., 2018; Johnson et al., 2022; Labrum & Solomon, 2016; McManus et al., 2017; Sun & Hsu., 2016; Svensson et al., 2020). However, the relationship between substance use and CPDA is complex. When substance use was involved, CPDA appeared to be financially motivated in that the child needed to satisfy their addiction, resulting in property damage (e.g., forcing locks to gain entry to parental property) and financial abuse (Johnson et al., 2018; Johnson et al., 2022; Svensson et al., 2020). However, in other cases, the child's substance use seemed to drive aggressive and violent behaviour (McManus et al., 2017), which can be a direct consequence of the psychopharmacology of the substance (possibly when parents refused the child's request for money or challenged the child's use of substances in the parental home).

All things considered, substance use must not be seen as an explanation but instead a behaviour that causes conflict between caregivers and their children. Therefore, the perpetrator's intention may not have been to create a power imbalance, as suggested by Ilabaca Baeza & Gaete Fiscella (2021), but rather to satisfy their addictions or negotiate acceptable behaviour in the family home. As a result, it could be argued that in these cases it is not DA, as the perpetrators are not seeking to exert power over their parents, which is argued to be the main driving force behind CPDA (Ilabaca Baeza & Gaete Fiscella, 2021). The

same argument could also be applied to mental illness because the perpetrator may not be seeking to assert control over their parents. Instead, they may be attempting to minimise their own distress via externalising behaviours, which often, unfortunately, are directed at those closest. However, the previous points do not intend to minimise the risk associated with substance use mental illness. However, it should be noted that substance use has been strongly linked with some mental illnesses, particularly psychotic, affective and personality disorders. However, serious mental illnesses, such as those previously mentioned and developmental disorders (e.g Autism spectrum disorder and attention-deficit hyperactivity disorder), appeared to heighten the risk of physical CPDA, regardless of substance use (Hsu et al., 2014; Hsu & Tu; 2013; Johnson et al., 2018; Johnson et al., 2022; Labrum & Solomon, 2020; McManus et al., 2017, Sun & Hsu, 2016; Svensson et al., 2020).

The literature consistently highlighted the association between mental illness in adult children and increased levels of parental victimisation, particularly physical violence (Hsu & Tu, 2013; Hsu et al., 2014; Johnson et al., 2018; Johnson et al., 2022; Kageyama et al., 2020; Labrum & Solomon, 2020; Smith, 2020; Sun & Hsu, 2016; Svensson et al., 2020). However, in other cases of CPDA, severe mental illness was not associated with using a weapon, threatening victims, or damaging property (Lambrum & Solomon., 2020). Therefore, the role of mental illness in CPDA is somewhat unclear. Nevertheless, Lambrum and Solomon (2020) argued that in cases where the CPDA perpetrator had a severe mental illness, the conflict was more likely to arise from the perpetrator's behaviour and issues related to their mental illness and broader family pathology. However, additional research is needed to ascertain the role of family pathology in CPDA to understand the specific dynamics underlying CPDA, which, to date, little research has attempted to do. The current literature suggests that no individual factors drive CPDA. Instead, certain combinations of dynamics and situational factors ultimately lead to CPDA. That said, from the literature identified in the searches, several perpetrator characteristics were notable in CPDA cases.

Most of the literature found that the perpetrators were equally likely to be male or female in CPDA cases, with three exceptions: Cano-Lozano et al., 2021b; McManus et al. (2017) and de Veinsten (2004), who found males more likely to perpetrate CPDA. McManus et al. (2017) utilised a criminal justice sample, and so this may be due, at least in part, to selection bias in

that police officers are more likely to see a male as a perpetrator of DA and be more of a risk to the victim than a female (e.g., Storey & Strand, 2012). However, Cano-Lozano et al. (2021b) utilised student samples and de Veinsten utilised a sample derived from the general population. Nevertheless, Simmons et al. (2020) found that male sex significantly predicted father abuse whilst witnessing marital violence predicted mother abuse. Moreover, current findings suggest that males are more likely to perpetrate serious violence, but in cases of mild violence, there were no significant sex differences (Ibabe et al., 2020). Therefore the role of the perpetrator's gender in CPDA is nuanced and may interact with several other variables.

Research has highlighted the shared characteristics between CPDA and IPV and their gendered nature (Holt & Devaney, 2015), with a higher proportion of male perpetrators, in both CPDA (de Veinsten 2004; Ibabe & Jaureguizar, 2010; Routt & Anderson, 2011; Holt & Devaney, 2015; McManus et al. 2017; Cano-Lozano et al., 2021b) and IPV (ONS, 2019; Moreira & de Costa, 2020; Gupta, Sachdeva & Kumar et al., 2022). This may be relevant, particularly when considering the relationship between IPV and CPDA, as current research suggests that exposure to inter-parental violence coupled with CPDA may lead to dating violence (Ibabe et al., 2020). Moreover, research has demonstrated that involvement in IPV acts as a mediational mechanism for the perpetuation of abuse towards parents (Fernández-González et al., 2021). However, the predictive role of CPDA in IPV perpetration is more relevant than the predictive role of IPV perpetration in CPDA (Fernández-González et al., 2021). Nevertheless, both CPDA and IPV are associated with each other, but more research is needed to understand this relationship.

Although some research into IPV has highlighted sex differences in the type of abuse perpetrated (Ibabe et al., 2020; Fernández-González et al., 2021), there is a wealth of research that suggests that physical IPV perpetration (e.g., Archer, 2000; 2002; 2006; Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012), victimisation (e.g., Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012), and emotional abuse and coercive control (Carney, Mohr & Barner, 2012) are similar between men and women, the findings from the current review suggests that the perpetrators' sex was not associated with the type of abuse perpetrated in CPDA either (Browne & Hamilton, 1998; Gamez-Gaudix & Calvete 2012; Gamez-Gaudix et al., 2012; Jiminez-Garcia et al., 2020), with the exception of de Veinsten (2004) that found males to be

more likely to physically abuse their elderly parents than females, which is somewhat consistent with Simmons et al.'s (2019; 2020) findings that this pattern appeared to change with age, with females becoming less likely to perpetrate any type of CPDA as they grew older. That said, whilst some findings suggest that participant sex is not significantly related to mother abuse, males were three times more likely to abuse their fathers than females (Simmons et al., 2022).

Of the studies that reported the age of CPVA perpetrators, their age typically ranged between their late teenage years and mid-twenties (Gamez-Guadix & Calvete, 2012; Gamez-Guadix et al., 2012; Jimenez-Garcia et al., 2020; McManus et al., 2017; Simmons et al., 2019a; Simmons et al., 2022; Trull-Olivia & Soler-Maso, 2021; Cano-Lozano et al., 2021a). However, in studies that included CPDA perpetrators with mental illness, their age was typically between thirty and forty years old. The dynamic of these families appears to be driven by the ongoing support that mentally ill adult children required from their parents (Hsu & Tu, 2013; Hsu et al., 2014; Kageyama et al., 2020; Smith, 2015), and conflict frequently stemming from perceived boundary violations between children and their parents (Smith, 2015).

Whilst it was fundamental to capture the characteristics of perpetrators, victim characteristics were also of significant interest. Detailed reports of CPDA victim characteristics were generally lacking, but there were apparent sex differences where they were reported. It appeared that mothers were more likely to be victims of CPDA than fathers (McManus et al., 2017; Sanchez et al., 2019; Moen & Shon, 2020). However, this finding was not consistent, with several studies that reported that both mothers and fathers were equally likely to experience CPDA (Browne & Hamilton, 1998; Gamez-Guadix & Calvete, 2012; Jimenez-Garcia et al., 2020; Lyons et al., 2015; Simmons et al., 2019a; Simmons et al., 2022). Nonetheless, some research has highlighted that parent-child aggression was the strongest predictor of father and one of the strongest predictors of mother abuse (Simmons et al., 2022). However, witnessing marital violence further increased the prediction of mother abuse, but not father abuse (Simmons et al., 2022). Therefore, children exposed to marital violence may be more likely to perpetrate CPDA towards their mother unless their father is directly aggressive towards them (Simmons et al., 2022). Irrespective, those that abused their mothers typically reported increased exposure to various forms of family violence including, marital violence

and parent-to-child victimisation (Martín et al., 2020; Cano-Lozano et al., 2021a; Cano-Lozano et al., 2022; Simmons et al., 2022). However, individuals who abused their mothers also reported higher trait anger, aggression, impulsivity, and rumination in response to negative affect. Nevertheless, those who abused their fathers reported increased anger and family violence (Simmons et al., 2022). Therefore, the drivers behind CPDA may vary to some degree depending on the gender of the perpetrator, victim and previous experiences of marital violence and victimisation at the hands of their parent (Cano-Lozano et al., 2022; Simmons et al., 2022).

Furthermore, the identified studies did not typically report information regarding the parents' age that experienced abuse, although one study suggested that older parents were at greater risk of financial abuse (Svensson et al., 2020). However, there was insufficient literature to allow any conclusion. Therefore, the typical age and gender of a parent experiencing CPDA remain unclear.

### ***Limitations of evidence***

While this review has highlighted some interesting findings, it is not without limitations. First, the total sample size included in this review was relatively small, partly due to the stringent inclusion criteria and the lack of studies considering adult children, over the age of 16, as CPDA perpetrators. Most research regarding CPDA focuses on perpetrators that are under the age of 16, which is problematic as it is likely that CPDA involving adult children will differ in terms of the nature of abuse (e.g., it may be more likely to be financially related) but also in victim vulnerability factors (e.g., elderly parents being cared for by their offspring). In addition, CPDA is often not considered DA by the child's parents, which, coupled with feelings of guilt and blame, may fuel a reluctance on behalf of parents to report their children. In turn, this limits the ability of researchers to investigate victimology and family dynamics which is necessary to develop a complete understanding of CPDA.

### ***Conclusions and future research directions***

From the evidence identified in this review, several significant observations were made. Firstly, most abusive children had experienced childhood abuse. Therefore, it is indicated that children may learn their abuse tactics from their parents and use the same tactics as their parents. However, it is unclear why some children learn abuse tactics dissimilar to those of

their parents. Therefore, further research is required to understand how abusive behaviour manifests within the family.

Both mental illness and substance use served as aggravating factors in CPDA. However, the relationship between mental illness and substance use in CPDA is complex and requires further research to understand their role within CPDA fully. Nevertheless, future research is needed to ascertain the motivations for CPDA in these cases and establish whether these behaviours do encompass CPDA in that they are repeated patterns of behaviour that cause harm and intend to create a power imbalance.

There were generally no significant sex differences regarding the perpetrator of CPDA. However, this pattern seemed to change as the perpetrator's age increased, with older females being less likely to perpetrate CPDA than older males. However, further research is required to investigate the developmental trajectory of CPDA from childhood into adulthood. Older perpetrators likely differ in terms of the nature of abuse and possibly frequency and severity, but to date, there is a distinct lack of research aimed at older perpetrators. On the other hand, no apparent sex differences emerged between victims most at risk of CPDA. However, in criminal justice samples or where victims are elderly, women may be more likely to be victimised than men.

While some research has attempted to understand the cycle of abuse involved in CPDA, there is an evident lack of research into the factors involved in the manifestation and maintenance of abuse. There also seems to be a lack of consideration for victimology in CPDA. Future research may benefit from understanding the effects of parenting styles, marital abuse, and parent-to-child abuse in CPDA. That said, a substantial amount of research is required to understand the dynamics of families and the influence of the factors identified where CPDA occurs. Developing this understanding will allow appropriate risk and need assessments to be developed and explore intervention approaches.



## Parricide: A Systematic Literature Review

Parricide is defined as the act of killing one's parents (Jung, Lee & Kim et al., 2014), regardless of whether death results from a single violent incident or an accumulation of abuse or neglect (Holt, 2017). There are derivatives of this term, namely matricide, the act of killing one's mother and patricide, the act of killing one's father (Walker, 2016). Parricide, regardless of the form it takes, typically becomes a cause célèbre, yet seems to be a neglected area of research in Psychology. Consequently, there is limited knowledge regarding perpetrators of parricide and less so about their victims. That said, findings that have been produced in the realm of parricide research are typically confined to the field of criminology, with conclusions drawn from small clinical samples that typically focus on the role of mental health. However, a few studies have attempted to identify factors beyond that of the perpetrator's mental illness.

Within Heide's typology (Heide, 1995; Heide & Petee, 2007; Heide, 2017), four distinct types of parricide offenders have been suggested including, severely abused perpetrators, severely mentally ill perpetrators, dangerously antisocial perpetrators, and the enraged perpetrator. However, researchers have emphasised that mental illness can only be considered a direct cause of parricide in the severely mentally ill perpetrator type (Heide, 2017). This caveat is an interesting one, as it suggests that there are factors beyond that of mental illness that ultimately cause a person to commit parricide, which contradicts established research that suggests that almost all parricide perpetrators experience mental illness (Bojanić, Flynn & Gianatsi et al., 2020). That said, Heide's work has been criticised for using extremely small sample sizes when studying 'antisocial children' (n=7). Therefore, researchers have questioned the generalisability of these findings (Thompson & Thompson, 2019). Regardless, researchers have tried to transfer this typology to adult perpetrators. However, it seems that it does not encompass the entire spectrum of perpetrator characteristics, family dynamics and situational factors, which can all serve as causes, drivers, and aggravating factors of parricide.

Existing research findings have provided insights into the characteristics of both parricide victims and perpetrators. Firstly, findings suggest that males are more likely to commit parricide than females (Fegadel & Heide, 2017; Bojanić et al., 2020) and has indicated typical

age ranges for parricide offenders. Male perpetrators are generally in their twenties when committing patricide, but slightly older, late twenties/early thirties, when committing matricide (Heide & Petee, 2007; Bojanić et al., 2020). Substance use is also frequently reported amongst parricide offenders, but a history of substance use was more commonly reported than current substance use (Amorado, Lin & Hsu, 2008). However, even a history of substance use has been intrinsically linked to mental illness (McDonald, Antoine & Liao et al., 2020). Therefore, it is unsurprising that existing research suggests that all parricide perpetrators experience some degree of mental illness (Bojanić et al., 2020). Although Heide (1995; 2017) has outlined the role of mental illness in parricide perpetrators, it is restricted to scenarios involving explosive and violent outbursts of aggression by a child towards their parent, which ultimately results in their parent's death. Therefore, this typology fails to consider other scenarios, such as mercy killings and neglect, in which perpetrators may not fall into any of Heide's typologies (Heide, 2017).

First, it is significant to mention that the term 'Mercy killing' is generally not used in English law (Holt, 2017) but is still referred to under specific synonyms such as 'assisted dying', 'assisted suicide', and 'euthanasia'. However, for the purpose of this review, the term mercy killing seems to be most appropriate. Mercy killing has been defined by Holt (2017) as "the act of ending another's life out of a perceived sense of compassion due to ongoing suffering experienced by the victim." However, this definition seems restrictive and does not account for mercy killings. These killings are committed either to relieve the suffering of the perpetrator or both the perpetrator and victim.

Whilst it is not necessarily uncommon for children to want to relieve the suffering of their parents, mercy killings can also arise from the child's desire to relieve their own suffering. In these scenarios, the child is usually the primary caregiver for their parent(s) and are overburdened by the responsibility and the emotional strain it brings (Hellen, Lange-Asschenfeldt & Ritz-Timme et al., 2015). However, it is pertinent to note that cases, where children kill their parents to bring mercy either to themselves or their parent are sporadic and under researched. That said, this phenomenon highlights a significant limitation of Heide's typologies (Heide, 2017), as it is unlikely that the perpetrator would fit any of Heide's established typologies (Heide, 2017). This limitation is also applicable to scenarios in which a

parents death results from neglect that their child has enabled. Cases had arisen where adult children had sole responsibility for the welfare of their elderly or ill parents, when in fact they were incapable of looking after themselves, let alone their parents, and has ultimately resulted in the death of their parent (Gómez-Durán, Martín-Fumadó & Litvan, 201). Therefore, it seems reasonable to suggest that the existing typologies currently do not encompass the entire breadth of parricide or consider the situational factors involved.

One significant factor that has been overlooked in parricide research is parenting styles, yet it is suggested that parenting styles play a significant role in the progression to parricide (Jacobsen, 2021). Parenting styles have been categorised into three types, authoritarian, permissive and authoritative (Baumrind, 1966). However, the permissive type has been further subdivided into two categories, including indulgent and neglectful, which further explains the dynamics that exist between parenting styles (Maccoby & Martin, 1983). Findings have highlighted the outcomes resulting from parenting styles, such as mental illness, abusive- and antisocial tendencies (Moen, 2017; Moen, 2019; Jacobsen, 2021), which may all contribute to parricide as causes, drivers, or aggravating factors.

Given the stance of existing research highlighting several factors involved in parricide, it is unlikely that parenting styles alone are a cause of parricide and, even as standalone constructs, may not serve as aggravating factors. As established literature has highlighted several factors that can all motivate a child to commit parricide, to gain a comprehensive understanding of the factors involved in parricide, this review aimed to collate and synthesise empirical research findings on parricide in terms of causes, drivers, and aggravating factors.

## ***Methods***

### ***Search Strategy***

Data were sourced from five databases: Web of Science, Google Scholar, Embase, Medline and PsycInfo. This combination of databases was selected to ensure that over 95% of published articles were identified (Bramer, Rethlefsen & Kleijnen et al., 2017). The systematic search intended to capture all published literature regarding the murder of parents at the

hands of their adult children. The search terms used were: Familicide OR Matricide OR Patricide OR Parricide. The last search was conducted on 24/02/2021.

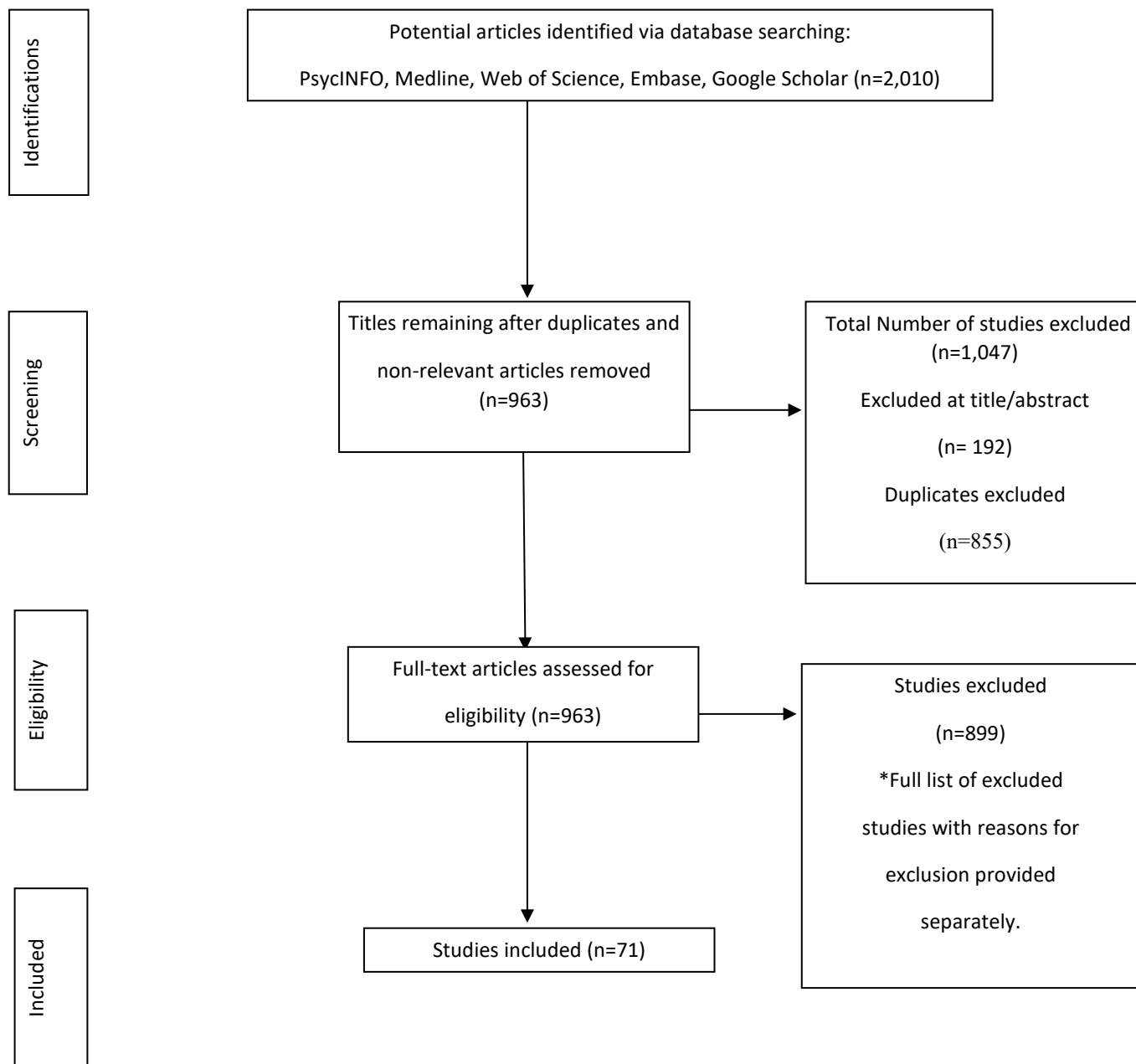
### ***Inclusions Criteria***

From the potential articles produced by systematic research, studies were selected that included at least one form of parricide, either matricide, patricide, or the killing of both parents (double parricide). This review aimed to identify all studies investigating perpetrators of parricide and provided information about causes, drivers, and aggravating factors of parricide. To be eligible for inclusion, the perpetrators of parricide within the study must have a minimum age of 16 or a mean age of 18 years or above (to capture age variance).

### ***Study Selection***

A stepwise approach was utilised to identify eligible articles. Firstly, titles and abstracts were screened, and irrelevant and duplicate articles were excluded, as well as those that were not written in English or translations were unavailable. In the second step, a reviewer screened all the remaining full-text articles to identify the mean age of the perpetrators of abuse. Figure 1 summarises the searching and screening process that was conducted in line with PRISMA guidelines (Page, McKenzie & Bossuyt, et al., 2020). A summary of the study selection process is presented in Figure 2.

Figure 2: PRISMA Flow diagram of study selection process from The PRISMA 2020 statement: an updated guideline for reporting systematic reviews (Page et al., 2020).



### ***Data Collection***

Data were extracted from eligible articles in line with SPIDER principles and included sample, phenomenon of interest, design, evaluation, and research type (Cook, Smith & Booth, 2012). For the purpose of this review, parricide, regardless of the gender of the victim and including step- and adoptive-parents was the phenomenon of interest. In addition, the author(s), year, and country of publication were also extracted.

Data about the perpetrator's characteristics were also extracted and included age, gender, ethnicity, substance use, mental illness, and information regarding any prior abuse they had experienced. In addition, victim characteristics were also extracted from the identified studies and included: age, gender, and their relationship to the perpetrator. Data regarding the victim's ethnicity were rarely reported, possibly since, in most studies, the perpetrator was the victim's biological child. Therefore, it is likely that the victim and perpetrator share the same ethnicity. Where full-text articles had incomplete or missing data, the reviewer contacted the study's corresponding author via email to obtain this information. If no response was received, the study was excluded.

## ***Results***

### ***Study Characteristics***

The studies included in this review were published between 1971 and 2022. The studies identified from the systematic search were conducted in various countries, nineteen studies were conducted in America, (Aguilar, 2019; Boots, & Heide, 2006; Fegadel, 2014; Fegadel & Heide, 2015; Fegadel & Heide, 2017; Fegadel & Heide, 2018; He, 2012; Heide, 1993; Heide, 2014; Heide & Petee, 2007; Holcomb, 2000; Hubbell, Heide & Khachatryan, 2019; Hubbell, Heide & Wagers, 2021; Maas, Prakash & Hollender et al., 1984; Mills & Kivisto 2022; Newhill, 1991; Sadoff, 1971; Viñas-Racionero, Schlesinger & Scalora et al., 2017; West & Feldsher, 2010).

One study was conducted in Australia, (Wick, Mitchell & Gilbert et al., 2008). Five studies in Brazil, (de Borba-Telles, Menelli-Goldfeld & Soares-Barros et al., 2017; Gomide, Cropolato & Antt et al., 2020; Teixeira, Meneguetto & Dalgalarondo, 2012; Valença, Mezzasalma &

Nascimento et al., 2009; Valença, Carvalho de Oliveira & de Borba-Telles et al., 2021). Four studies were conducted in Canada, (Bourget, Gagne & Labelle, 2007; Leveillee, Lefebvre & Vaillancourt, 2010; Marleau, Auclair & Millaud, 2006; Millaud, Auclair & Meunier, 1996). One study was conducted in Chile, (Orellana, Alvarado & Muñoz-Neira et al., 2013). Two studies were conducted in Finland, (Lauerma, Voutilainen & Tuominen, 2010; Liettu, Saavala & Hakko, et al., 2009). Five studies were conducted in France, (Gabison-Hermann, Raymond & Mathis et al., 2010; Le Bihan & Benezech, 2004; Le Bihan, Ureten, & Lavole, 2012; Raymond, Larhant & Mahe et al., 2020; Raymond, Léger & Lachaux, 2015). One study was conducted in Germany, (Hellen et al., 2015).

Two studies were conducted in Ghana (Adinkrah, 2017; Adinkrah, 2018). One study was conducted Hungary, (Fodor, Fehér & Szabados et al., 2019). Five studies were conducted in Italy, (Carabellese, Rocca & Candelli et al., 2014; Catanesi, Rocca & Candelli et al., 2015; Di Vella, Grattagliano & Romanelli et al., 2017; Trotta, Mandarelli & Ferorelli et al., 2020; Petroni, Mandarelli & Marasco, et al., 2022). Two studies were conducted in Korea (Jung et al., 2014; Lee, Lim & Lee, et al., 2017). One study was conducted in Portugal (Dantas, Santos & Dias et al., 2014). One study was conducted in Russia (Jargin, 2013). Two studies were conducted in Serbia (Dunjic, Maric & Dunjic et al., 2008; Novović, Pavkov & Smederevac et al., 2013). Two studies were conducted in Spain, (Cutrim Jr, Stuchi & Valença, 2013; Gómez-Durán et al., 2013).

Three studies were conducted in South Africa (Moen & Shon, 2020a; Moen & Shon, 2020b; Ogunwale & Abayomi, 2012). One study was conducted in Taiwan (Amorado et al., 2008). One study was conducted in Thailand (Manujantararat, Kanyajit & Rujipark et al., 2021). Four studies were conducted in Tunisia (Dakhlaoui, Khemiri & Gaha et al., 2009; Ellouze, Damak & Bouzita et al., 2017; Kolsi, Hentati & Baati, 2021; Oueslati, Fekih-Romdhane & Zerriaa et al., 2018). Two studies were conducted in Turkey (Dogan, Demirci & Deniz et al., 2010; Sahin, Sahin & Tavasli et al., 2016). Five studies were conducted in the United Kingdom (Baxter, Duggan & Larkin, et al., 2001; Bojanić et al., 2020; Bows, 2019; d'Orban & O'Connor, 1989; Holt, 2017). The remaining study was conducted in Zimbabwe (Menezes, 2010).

Studies utilised diverse samples: The majority of identified studies (n=26) did not clearly state the sample from which perpetrators were derived (Carabellese et al., 2014; Cutrim Jr et al.,

2013; Di Vella et al., 2017; Dogan et al., 2010; Ellouze et al., 2017; Fodor et al., 2019; Gómez-Durán et al., 2013; Gomide et al., 2020; Hubbell et al., 2021; Jargin, 2013; Kolsi et al., 2021; Lauerma et al., 2010; Maas et al., 1984; Manujantararat et al., 2021; Newhill, 1991; Novović et al., 2013; Ogunwale et al., 2012; Orellana et al., 2013; Oueslati et al., 2018; Petroni et al., 2022; Raymond et al., 2020; Sadoff; 1971; Teixeira et al., 2012; Trotta et al., 2020; Valença et al., 2009; West et al., 2010). Sixteen studies utilised police data sets (Aguilar, 2019; Amorado et al., 2008; Bojanić et al., 2020; Bows et al., 2019; Fegadel, 2014; Fegadel et al., 2015; Fegadel et al., 2017; Fegadel et al., 2018; He, 2012; Heide, 2013; Heide, 2014; Heide, 2007; Jung et al., 2014; Mills & Kivisto, 2022; Valença et al., 2021; Viñas-Racionero et al., 2017). Twelve studies recruited clinical samples (Baxter et al., 2001; Catanesi et al., 2015; Dakhlaoui et al., 2009; de Borba-Telles et al., 2017; Gabison-Hermann et al., 2010; Le Bihan et al., 2012; Le Bihan et al., 2004; Lee et al., 2017; Marleau et al., 2006; Menezes, 2010; Millaud et al., 1996; Raymond et al., 2015). A further six studies utilised media sources (Adinkrah, 2017; Adinkrah, 2018; Boots et al., 2006; Hubbell et al., 2000; Moen et al., 2020a; Moen et al., 2020b). Five studies utilised autopsy reports, (Bourget et al., 2007; Dantas et al., 2014; Dunjić et al., 2008; Hellen et al., 2015; Leveillee et al., 2010). Two further studies reported that they obtained samples from psychiatric evaluation reports (Liettu et al., 2009; Sahin et al., 2016). In the remaining studies, one study utilised samples from the home office homicide index (Holt, 2017); one from a mixture of case records, personal contacts and follow-up information provided by hospital and prison records (d'Orban et al., 1989). Another study reported samples from 'arrested individuals and hospital admissions' (Holcomb, 2000). The final study recruited samples from a forensic science department (Wick et al., 2008).

This review intended to capture all studies related to parricide phenomena of interest. In forty-three studies, the phenomena of interest was parricide (Aguilar, 2019; Amorado et al., 2008; Baxter et al., 2001; Bojanić et al., 2020; Boots et al., 2006; Bourget et al., 2007; Cutrim Jr et al., 2013; Dakhlaoui et al., 2009; Dantas et al., 2014; de Borba-Telles et al., 2017; d'Orban et al., 1989; Dunjić et al., 2008; Fegadel, 2014; Fegadel et al., 2018; Fodor et al., 2019; Gabison-Hermann et al., 2010; Gomide et al., 2020; He, 2012; Heide, 2007; Holcomb, 2000; Holt, 2017; Hubbell et al., 2000; Hubbell et al., 2021; Jung et al., 2014; Le Bihan et al., 2012; Le Bihan et al., 2004; Lee et al., 2017; Leveillee et al., 2010, Liettu et al., 2009; Manujantararat et al., 2021; Marleau et al., 2006; Mills & Kivisto, 2022; Menezes, 2010; Millaud et al., 1996;



Moen et al., 2020a; Newhill et al., 1991; Novović et al., 2013; Raymond et al., 2015; Sadoff; 1971; Sahin et al., 2016; Valença et al., 2021; West et al., 2010). However, some studies included in this review had a slightly different focus, with sixteen studies relating to matricide (Adinkrah, 2018; Carabellese et al., 2014; Catanesi et al., 2015; Dogan et al., 2010; Ellouze et al., 2017; Gómez-Durán et al., 2013; Heide, 2013; Hellen et al., 2015; Kolsi et al., 2021; Lauerma et al., 2010; Ogunwale et al., 2012; Orellana et al., 2013; Petroni et al., 2022; Teixeira et al., 2012; Valença et al., 2009; Wick et al., 2008). Five studies investigated patricide (Adinkrah, 2017; Di Vella et al., 2017; Heide, 2014; Oueslati et al., 2018; Trotta et al., 2020); two studies relating to familicide (Fegadel et al., 2017; Viñas-Racionero et al., 2017) and four orientated around double parricide specifically, (Fegadel et al., 2015; Maas et al., 1984; Moen et al., 2020b; Raymond et al., 2020). Of the remaining two studies, the phenomenon of interest in one study was domestic homicide (Bows et al., 2019); in the other, it was elder abuse (Jargin, 2013).

There were no restrictions regarding research design. As a result, various research designs were employed within the studies selected for inclusion. The majority of studies (n=24) were case studies (Carabellese et al., 2014; Cutrim Jr et al., 2013; Di Vella et al., 2017; Dogan et al., 2010; Ellouze et al., 2017; Fodor et al., 2019; Gómez-Durán et al., 2013; Jargin, 2013; Kolsi et al., 2021; Lauerma et al., 2010; Maas et al., 1984; Millaud, 1996; Newhill, 1991; Novović et al., 2013; Ogunwale et al., 2012; Orellana et al., 2013; Oueslati et al., 2018; Petroni et al., 2022; Raymond et al., 2020; Sadoff; 1971; Teixeira et al., 2012; Trotta et al., 2020; Valença et al., 2009; West et al., 2010). However, twelve studies conducted secondary data analyses (Bojanić et al., 2020; Bows et al., 2019; Fegadel, 2014; Fegadel et al., 2015; Fegadel et al., 2017; Fegadel et al., 2018; He, 2012; Heide, 2013; Heide, 2014; Heide, 2007; Holt, 2017; Hubbell et al., 2000). Nine studies utilised a retrospective design to review parricide cases (Aguilar, 2019; Bourget et al., 2007; d'Orban et al., 1989; Gabison-Hermann et al., 2010; Hellen et al., 2015; Holcomb, 2000; Liettu et al., 2009; Viñas-Racionero et al., 2017; Wick et al., 2008). Four further studies utilised a newspaper surveillance design (Adinkrah, 2017; Adinkrah, 2018; Moen et al., 2020a; Moen et al., 2020b). Eight studies conducted descriptive studies (Gomide et al., 2020; Le Bihan et al., 2012; Le Bihan et al., 2004; Leveillee et al., 2010; Manujantararat et al., 2021; Mills & Kivisto, 2022; Sahin et al., 2016; Valença et al., 2021). An additional four studies utilised a cross-sectional design with self-report measures (de Borba-

Telles et al., 2017; Lee et al., 2017; Menezes, 2010; Raymond et al., 2015). Four studies performed case content analyses (Amorado et al., 2008; Boots et al., 2006; Hubbell et al., 2021; Jung et al., 2014). In addition, three studies implemented a retrospective observational design (Dakhlaoui et al., 2009; Dantas et al., 2014; Dunjić et al., 2008). Two studies employed a comparative design (Baxter et al., 2001; Marleau et al., 2006). The remaining study implemented a phenomenological design (Catanesi et al., 2015).

### ***Perpetrator Characteristics***

A summary of the characteristics of the perpetrators identified within the included studies is presented in Table 1. Most studies (n=63) reported the mean age of participants. However, one study reported the median age of perpetrators (Bojanić et al., 2020), one reported the modal age range (Bows, 2019), and the remaining studies did not report the age of perpetrators but made it clear that the perpetrators were over 18 years old (Jargin, 2013; Jung et al., 2014; Kolsi et al., 2021; Mills & Kivisto, 2022; Raymond et al., 2020) or in one study, that they were over 16 years old (Manujantararat et al., 2021). In addition, all studies reported the gender of the perpetrators.

Of the included studies, only twenty-one studies reported the ethnicity of the perpetrators (Aguilar, 2019; Bojanić et al., 2020, Boots et al., 2006; Cutrim Jr. et al., 2013; Dantas et al., 2014; de Borba-Telles et al., 2017; d'Orban & O'Connor, 1989; Fegadel, 2014; Fegadel & Heide, 2015; Fegadel & Heide, 2017; Fegadel & Heide, 2018; He, 2012; Heide, 2013; Heide, 2014; Heide, 2007; Holt, 2017; Hubbell et al., 2000; Menezes, 2010; Moen & Shon, 2020a; Moen & Shon 2020b; Viñas-Racionero et al., 2017). The remaining fifty studies did not report the ethnicity of parricide perpetrators.

As mentioned previously, data regarding the perpetrator's psychiatric conditions were extracted from eligible studies where possible. Most included studies (n=56) report the psychiatric conditions of parricide perpetrators. However, fifteen studies did not report any data relating to perpetrator's psychiatric conditions (Bows, 2019; Fegadel, 2014; Fegadel & Heide, 2015; Fegadel & Heide, 2017; Fegadel & Heide, 2018; He, 2012; Heide, 2013; Heide, 2014; Heide, 2007; Holt, 2017; Manujantararat et al., 2021; Mills & Kivisto, 2022; Moen & Shon 2020a; Moen & Shon 2020b; Sadoff, 1971).

Data about parricide perpetrators' substance use were extracted from thirty-nine studies (Adinkrah, 2017; Adinkrah, 2018; Aguilar, 2019; Amorado et al., 2008; Baxter et al., 2001; Bojanić et al., 2020; Boots et al., 2006; Bourget et al., 2007; Catanesi et al., 2015; Cutrim Jr et al., 2013; Dakhlaoui et al., 2009; Dantas et al., 2014; de Borba-Telles et al., 2017; Di Vella et al., 2017; Dogan et al., 2010; d'Orban & O'Connor, 1989; Dunjić et al., 2008; Ellouze et al., 2017; Fodor et al., 2019; Gomide et al., 2020; Holcomb, 2000; Hubbell et al., 2000; Lauerma et al., 2010; Le Bihan et al., 2012; Le Bihan et al., 2004; Leveillee et al., 2010; Liettu et al., 2009; Manujantararat et al., 2021; Marleau et al., 2006; Menezes, 2010; Millaud et al., 1996; Newhill, 1991; Ogunwale et al., 2012; Petroni et al., 2022; Raymond et al., 2015; Sahin et al., 2016; Valença et al., 2009; Valença et al., 2021; Viñas-Racionero et al., 2017). The remaining thirty-two studies did not report information regarding perpetrators substance use.

Data regarding perpetrators previous experiences of abuse were extracted, but only twenty-five studies reported this information (Aguilar, 2019; Amorado et al., 2008; Bojanić et al., 2020; Catanesi et al., 2015; Cutrim Jr. et al., 2013; Dakhlaoui et al., 2009; Dantas et al., 2014; de Borba-Telles et al., 2017; Dogan et al., 2010; d'Orban & O'Connor, 1989; Gómez-Durán et al., 2013; Gomide et al., 2020; Hubbell et al., 2000; Hubbell et al., 2021; Kolsi et al., 2021; Lauerma et al., 2010; Le Bihan et al., 2004; Marleau et al., 2006; Novović et al., 2013; Petroni et al., 2022; Raymond et al., 2020; Raymond et al., 2015; Sadoff; 1971; Valença et al., 2021; Viñas-Racionero et al., 2017). The remaining forty-six studies did not provide any data relating to perpetrators prior experience of abuse.

Table 1: Parricide perpetrator characteristics

Author	Year	Subjects (n)	Gender (% Male)	Age (M)	Ethnicity	Mental Illness	Substance Use	Prior experiences of abuse
Adinkrah	2017	18	94.4	19.7	Not reported	Mental illness factored into crime (33.3%)	Mentioned not reported	Not reported
Adinkrah	2018	21	81.0	31.5	Not reported	Some form of psychiatric illness (33.3%)	Mentioned not reported	Not reported
Aguilar	2019	18	66.7	35	Hispanic/Latino (50%); Caucasian (38.9%); Asian (11.1%)	Bipolar disorder (20%) Major Depression (20%) Schizoaffective disorder (20%) Panic Disorder (20%) Post-Traumatic Stress Disorder (20%)	Alcohol Amphetamines Cannabis Cocaine Opioid Sedative/Hypnotic/Anxiolytic LSD Ecstasy *Broken down by gender	Physical and sexual abuse reported *Broken down by gender
Amorado et al.,	2008	17	88.2	30	Not reported	Mental illness (65%)	Drug history (53%) Alcohol history (41%)	Abuse (41.2%) Neglect (23.5%)
Baxter et al.,	2001	98	91.0	30.6	Not reported	Schizophrenia (78.6%) Mania (1%) Depression (8%) Personality disorder (17%) No data (2%)	Alcohol (17.4%) Illicit drugs (7.1%)	Not reported
Bojanić et al.,	2020	340	88.0	30 (median)	Black and minority ethnic group (16%)	Mental illness (56%)	History of alcohol misuse (55%) History of drug misuse (61%)	Offender was a victim of child abuse (56%)
Boots & Heide,	2006	282	85.0	20	White (65%) Asian (28%) Black (7%)	Mental illness (17%)	Alcohol and drug use (11%)	Abuse (33%)
Bourget et al.,	2007	73	95.9	30.6	Not reported	Psychotic disorder (67%)	Substance abuse (2.8%)	Not reported
Bows	2019	97	82.0	40-49 (mode)	Not reported	Not reported	Not reported	Not reported
Carabellese et al.,	2014	2	100	19.5	Not reported	Schizophrenia (50%) Capgras syndrome (100%)	Not reported	Not reported
Catanesi et al.,	2015	9	100	36.5	Not reported	Schizophrenia (94.44%) Schizoaffective disorder (11.11%) Psychosis not specified (11.11%) Personality disorder (33.33%)	Reported for one case (type not specified)	Emotional and physical abuse reported

Table 1 continued

Author	Year	Subjects (n)	Gender (% Male)	Age (M)	Ethnicity	Mental Illness	Substance Use	Prior experiences of abuse
Cutrim Jr. et al.,	2013	1	100	32	Hispanic (100%)	Schizophrenia (100%)	Cannabis use (100%)	Sexual abuse reported
Dakhlaoui et al.,	2009	16	100	28	Not reported	Mental illness (81%)	Addictive behaviour (31%)	Physical and emotional abuse reported *Not clearly reported
Dantas et al.,	2014	7	85.7	29	Caucasian (100%)	Schizophrenia (14.29%) Depression (14.29%) Depression and domestic violence (14.29%) Domestic violence (28.57%) Unknown (28.57%)	Alcohol use (57.14%) Drug use (14.29%)	Physical and emotional abuse reported *Individual case studies
de Borba-Telles et al.,	2017	18	100	29.2	Caucasian (83.3%)	Diagnosed with a psychiatric illness before the offence (83.3%) Schizophrenia (61.1%), Antisocial personality disorder (16.7%) Moderate intellectual developmental disorder (11.2%) Bipolar disorder (5.6%)	Severe substance-related disorder (5.6%)	Physical abuse (22.2%)
Di Vella et al.,	2017	1	0	45	Not reported	No significant mental health history	Past use of cannabis, cocaine, and heroin	Not reported
Dogan et al.,	2010	1	0	33	Not reported	Schizophrenia (100%)	No history of substance abuse	Emotional abuse reported
d'Orban et al.,	1989	17	0	39.5	Two from the West Indies; One from North America; One from Europe; Remaining 13 from the UK	Schizophrenia (35.29%) Psychotic depression (29.41%) Personality disorders (17.65%) Alcoholism (5.88%)	Alcohol use (41%)	Physical and emotional abuse reported
Dunjić et al.,	2008	33	87.8	31.2	Not reported	Schizophrenia (24.2%) Personality disorder (15.2%) No psychiatric diagnosis (39.4%)	Drug addiction (3%)	Not reported

Table 1 continued

Author	Year	Subjects (n)	Gender (% Male)	Age (M)	Ethnicity	Mental Illness	Substance Use	Prior experiences of abuse
Ellouze et al.,	2017	1	100	31	Not reported	Schizophrenia (100%)	Alcohol use (100%)	Not reported
Fegadel	2014	603	84.4	30.5	White (77%); Black (22%); Asian/Pacific Islander and American; Indian/Alaskan Native (2%)	Not reported	Not reported	Not reported
Fegadel & Heide,	2015	35	91.4	29.8	White (95%); Black (6%)	Not reported	Not reported	Not reported
Fegadel & Heide,	2017	14	92.9	24	White (71.43%); Black (28.57%)	Not reported	Not reported	Not reported
Fegadel & Heide,	2018							
	NIBRS Dataset	603	84.4	31	White (77%); Black (22%); Asian/Pacific Islander American (1%); Indian/Alaskan Native (1%)	Not reported	Not reported	Not reported
	SHR Dataset	3887	86.6	31.3	White (70%); Black (28%); Asian/Pacific Islander American (1.5%); Indian/Alaskan Native (1%)	Not reported	Not reported	Not reported
Fodor et al.,	2019	2	100	53	Not reported	Schizophrenia (100%) Capgras delusion (100%)	No history of substance use	Not reported
Gabison-Hermann et al.,	2010	29	96.5	29	Not reported	Schizophrenia (79.3%)	Not reported	Not reported
Gómez-Durán et al.,	2013	2	50.0	40	Not reported	Autistic Spectrum Disorder (100%)	Not reported	Emotional abuse
Gomide et al.,	2020	60	0	34	Not reported	Not reported	Alcoholism reported	Maltreatment (39.1%), Rape (15.6%)
He	2012	242	84.7	27	Black (57%); White (24%)	Not reported	Not reported	Not reported

Table 1 continued

Author	Year	Subjects (n)	Gender (% Male)	Age (M)	Ethnicity	Mental Illness	Substance Use	Prior experiences of abuse
Heide	2013	3118	84.0	32	White, (72.1%); Black (26.1%); American Indian/Alaskan Native (0.5%); Asian/Pacific Islander (1.2%)	Not reported	Not reported	Not reported
Heide	2014	5043	87.5	26.05	White (66.6%); Black (31.5%); American Indian/Alaskan Native (0.9%); Asian/Pacific Islander (1.0%)	Not reported	Not reported	Not reported
Heide	2007	3122 2436	70.6	27.5	White (67.2%); Black (30.4%); Oriental (1%). Indian (0.9); Other (0.1%); Unknown (0.4%)	Not reported	Not reported	Not reported
Hellen et al.,	2015	2	0%	37	Not reported	Obsessive-compulsive personality traits (100%) Schizotypal personality trait (50%)	Not reported	Not reported
Holcomb	2000	13	76.9	24.46	Not reported	Epilepsy (7.69%), psychosis (15.38%), schizophrenia (30.77%), abnormal personality (7.69%), narcissistic personality (7.69%), schizoaffective disorder (7.69%), not reported (15.38%)	Intoxicated (7.69%) Drug dependence (7.69%) Not reported (84.62%)	Not reported
Holt	2017	693	89.80	32.5	White (84%); Black (8%); Asian (7%)	Not reported	Not reported	Not reported
Hubbell et al., Hubbell et al.,	2000 2021	46	91.30	19.3 18.05	White (74.4%); Black (15.4%); Other (10.3%) White (67%), Black (19%), Asian (6%), Other (8%)	Mental illness/Psychosis (23.9%) Psychosis (7%), bizarre beliefs (11%), motivated by mental illness (15%)	Substance use (6.5%) Not reported	Abuse reported (17.4%) Physical (4%), verbal ("%), sexual (2%), multiple types excluding sexual (13%), type unclear (2%), no abuse (79%)
Jargin	2013	2	66.60	Not clearly reported	Not reported	Schizoid/sadistic personality (33.3%)	Not clearly reported	Not reported
Jung et al.,	2014	338	89.6	Mean age over 18	Not reported	Mental illness reported (28.7%)	Not reported	Not reported
Kolsi et al., Lauerma et al.,	2021 2010	1	66.7% 100	Over 18 years 20	Not reported Not reported	Schizophrenia (66.7%), schizoaffective disorder (33.3%) Severe psychopathy	Not reported Alcohol use reported	Not reported Abuse reported
Le Bihan et al.,	2004	42	100	29.9	Not reported	Schizophrenia (83.3%) Persistent delusional disorder (14.3%) Substance-induced psychotic disorder (2.4%)	Alcohol abuse (52.4%) Drug use (mainly cannabis, 40.5%)	Abuse reported (19.1%)
Le Bihan et al.,	2012	56	100	30.9	Not reported	Paranoid schizophrenia/ schizoaffective disorder (85.7%), Psychotic disorder related to psychoactive substances (1.8%), Emotionally unstable personality (1.8%)	Alcohol use (16%) Drug use (16%)	Not reported

Table 1 continued

Author	Year	Subject (n)	Gender (% Male)	Age (M)	Ethnicity	Mental Illness	Substance Use	Prior experiences of abuse
Lee et al.,	2017	73	84.90	41.23	Not reported	Schizophrenia or schizoaffective disorder (85.7%) Psychotic disorder related to psycho-substances (1.8%) Emotionally labile personality (1.8%)	Not reported	Not reported
Leveillee et al.,	2010	16	100	31	Not reported	Matricidal offenders: Psychosis (25.6%), Personality/substance-related disorder (25.6%), Other (1.2%). Patricidal offenders: Psychosis (16.0%), Personality /substance-related disorder (29.2%), Other (4.7%)	Matricidal offenders: Alcohol use (58.1%), Drug use (11.6) Patricidal offenders: Alcohol use (65.1), Drug use (16.0)	Not reported
Liettu et al.,	2009	192	100	Matricidal offenders (30.1) Patricidal offenders (27.1)	Not reported	Matricide offenders <ul style="list-style-type: none"> <li>○ Paranoid schizophrenia (28%)</li> <li>○ Cluster A personality disorder (15.4%)</li> <li>○ Cluster B personality disorder (28.2)</li> <li>○ Cluster C personality disorder (61.5)</li> </ul> Patricide offenders <ul style="list-style-type: none"> <li>○ Paranoid schizophrenia (2%)</li> <li>○ Cluster A personality disorder (7.4%)</li> <li>○ Cluster B personality disorder (42.6%)</li> <li>○ Cluster C personality disorder (54.4%)</li> </ul>	Matricidal offenders <ul style="list-style-type: none"> <li>○ Alcohol use (58.1%)</li> <li>○ Drug use (11.6%)</li> </ul> Patricidal offenders <ul style="list-style-type: none"> <li>○ Alcohol use (65.1%)</li> <li>○ Drug use (16.0%)</li> </ul>	Not reported
Maas et al.,	1984	2	100	32	Not reported	Paranoid schizophrenia (100%)	Not reported	Not reported
Manujantarat et al.,	2021	21	100	Over 16 years	Not reported	Not reported	Reported	Physical and verbal abuse
Marleau et al.,	2006	43	93.0	31.21	Not reported	Paranoid schizophrenia (56%), Bipolar mood disorder (with psychosis) (12%) Schizoaffective disorder (9%). Delusions of persecution (67%) Grandeur (23%) Mandatory auditory hallucinations (40%) Axis I diagnosis involving narcissistic and borderline personality traits (26%).	Substance abuse in the past most (54%)	Family violence (30%) Victim of violence (17%)
Menezes	2010	39	87.0	35	African (100%)	Male: Schizophrenia/psychosis (41%); Epilepsy (7.6%); Personality disorder (2.5%). Female: Schizophrenia/psychosis (7.6%); Personality disorder (7.6%)	Alcohol and cannabis use (25%)	Not reported
Millaud et al.,	1996	12	100	31	Not reported	Paranoid schizophrenia (41.7%), Paranoid disorder Delusional disorder associated with psychoactive substances (16.7%), bipolar disorder with psychosis (16.7%), Depressive disorder with psychosis (8.3%), Borderline disorder (16.7%), Passive-aggressive personality (16.7%), Dependent personality (8.3%)	Alcohol and drug abuse (41.7%) Alcohol consumption or drug use (33.3%)	Not reported



Table 1 continued

Author(s)	Year	Subjects (n)	Gender (%Male)	Age (M)	Ethnicity	Mental Illness	Substance Use	Prior experiences of abuse	
Mills & Kivisto	2022	7,174	Not reported	Over 18	Not reported	Not reported	Not reported	Not reported	
Moen & Shon	2020a	18	88.89	23	White (38%), Black (24%), Asian (20%), Other (7%)	Not reported	Not reported	Not reported	
Moen & Shon	2020b	58	79.0	20	Black (22%); White (56%); Asian/Indian (17%); Other (6%)	Not reported	Not reported	Not reported	
Newhill	1991	2	100	Case 1	45	Not reported	Paranoid schizophrenia	Not reported	Not reported
				Case 2	Not reported	Not reported	No mental illness	Alcohol use	Not reported
				Case 3	24	Not reported	Paranoid schizophrenia, with passive-aggressive features. Psychosis and delusions.	Artane use	Not reported
				Case 4	19	Not reported	Antisocial personality disorder	Drug abuse/mixed substances.	Verbally aggressive father
Novović et al.,	2013	1	100	27	Not reported	Schizoid personality (100%)	Not reported	Emotional and physical abuse reported	
Ogunwale et al.,	2012	2	50.0	26.5	Not reported	Schizophrenia (100%)	Cannabis use (50%)	Not reported	
Orellana et al.,	2013	1	0	62	Not reported	Psychosis (100%)	Not reported	Not reported	
Oueslati et al.,	2018	1	100	29	Not reported	Schizophrenia and PTSD (100%)	Not reported	Not reported	
Petroni et al.,	2022	1	100	19	Not reported	Schizophrenia (100%)	Cannabis (100%)	Not reported	
Raymond et al.,	2020	2	50.0	22 and 50s	Not reported	Schizophrenia (50%), bipolar disorder (50%)	Not reported	Abuse reported (50%)	
Raymond et al.,	2015	40	97.5	28	Not reported	Schizophrenia (87.5%): Paranoid (75%), Disorganized, (7.5%), Undifferentiated (5%). Delusional disorders (5%), schizoaffective disorder (2.5%) Personality disorder (5%)	Alcohol associated with cannabis (20%) cannabis alone (15%), polydrug use (12.5%), alcohol alone (7.5%), no alcohol/drugs (32.5%)	Physical (>50%) Sexual abuse (10%)	

*Table 1 continued*

Author(s)	Year	Gender (% Male)	Subjects (n)	Age (M)	Ethnicity	Mental Illness	Substance Use	Prior experiences of abuse
Sadoff	1971	100	1		19.5	Not reported	Not reported	Not reported
Sahin et al.,	2016	92.6	135	30.73	Not reported	History of Psychosis (24.4%) Major depression (3%) bipolar disorder (2.2%) antisocial personality disorder (2.2%) Epilepsy (1.5%) Anxiety disorder (1.5%) Psychosis diagnosed after the offence (30.4%)	Alcohol dependency (4.4%)	Not reported
Teixeira et al.,	2012	100	1	22	Not reported	Schizophrenia (100%)	Not reported	Not reported
Trotta et al.,	2020	100	1	45	Not reported	Schizoaffective disorder (100%) Capgras delusion (100%)	Not reported	Not reported
Valença et al.,	2009	0	1	28	Not reported	Bipolar disorder (100%)	Drug use (100%)	Not reported
Valença et al., 2021	2021	50	2	27.3	Not reported	Bipolar disorder type I (50%) Schizophrenia (50%)	No substance use (100%)	Not reported
Viñas-Racionero et al.,	2017	84.2	19	18	Caucasian (78.95%)	Depression (5.26 %) Schizophrenia (5.26%)	History of substance use (47.37 %) Marijuana (31.58%) Cocaine (26.32%) Crystal meth (10.53%) LSD (10.53%) Alcohol (5.26 %)	Physical and sexual violence reported (21.05%)
West & Feldsher,	2010	100	1	37	Not reported	Schizophrenia (100%)	Not reported	Not reported
Wick et al.,	2008	90.9	11	28.7	Not reported	Mental illness (90.9%)	Not reported	Not reported

### ***Victim Characteristics***

A summary of victim characteristics is presented in Table 2. Most studies reported the gender of victims (n=61). However, the gender of victims was not reported in ten studies (d'Orban & O'Connor, 1989; Ellouze et al., 2017; Gómez-Durán et al., 2013; Le Bihan et al., 2004; Lee et al., 2017; Leveillee et al., 2010; Manujantararat et al., 2021; Moen & Shon 2020a; Raymond et al., 2015; Sadoff; 1971). Over half of the studies (n=42) did not report the age of victims, and one study had missing age data (Jargin, 2013). However, the remaining twenty-six studies reported the mean age of parricide victims (Aguilar, 2019; Amorado et al., 2008; Bourget et al., 2007; Catanesi et al., 2015; Dantas et al., 2014; de Borba-Telles et al., 2017; Di Vella et al., 2017; Dogan et al., 2010; Dunjić et al., 2008; Fegadel, 2014; Fegadel & Heide, 2015; Fegadel & Heide, 2017; Fegadel & Heide, 2018; Heide, 2013; Heide, 2014; Heide, 2007; Hellen et al., 2015; Holt, 2017; Hubbell et al., 2000; Hubbell et al., 2021; Leveillee et al., 2010; Menezes, 2010; Millaud et al., 1996; Trotta et al., 2020; Viñas-Racionero et al., 2017; Wick et al., 2008). The remaining studies reported the age range of victims (Jung et al., 2014; Bows et al., 2019).

There were limited data regarding victim ethnicity. As a result, most studies (n=59) failed to report victims' ethnicity. However, the victim's ethnicity was reported in twelve studies and is presented in Table 2 (Bows, 2019; Fegadel, 2014; Fegadel & Heide, 2015; Fegadel & Heide, 2017; Fegadel & Heide, 2018; He, 2012; Heide, 2013; Heide, 2014; Heide, 2007; Holt, 2017; Hubbell et al., 2021; Viñas-Racionero et al., 2017). In most studies (n=43), the victim's relationship to the perpetrator was mother or father, with data presented in tandem. However, in eighteen studies, the relationship between the victim and perpetrator was mother-child (Adinkrah, 2018; Carabellese et al., 2014; Catanesi et al., 2015; Dogan et al., 2010; Ellouze et al., 2017; Heide, 2013; Heide, 2007; Hellen et al., 2015; Holcomb, 2000; Kolsi et al., 2021; Lauerma et al., 2010; Ogunwale et al., 2012; Orellana et al., 2013; Petroni et al., 2022; Teixeira et al., 2012, Valença et al., 2009; West & Feldsher, 2010; Wick et al., 2008). In five studies, the relationship between victim and perpetrator was father-child (Adinkrah, 2017; Cutrim Jr. et al., 2013; Di Vella et al., 2017; Oueslati et al., 2018; Trotta et al., 2020). In three studies, the relationship between victim and perpetrator was not reported (Gómez-Durán et al., 2013; Lee et al., 2017; Manujantararat et al., 2021; Sadoff, 1971). There were multiple family relationships in the remaining study, including parents, grandparents, and siblings (Viñas-Racionero et al., 2017).

Table 2: Victim characteristics

Author(s)	Year	Number of victims (n)	Gender (% Male)	Age (Mean)	Ethnicity	Relationship to perpetrator
Adinkrah	2017	18	100	Not reported	Not reported	Father
Adinkrah	2018	21	0	Not reported	Not reported	Mother
Aguilar	2019	18	44.4	62.8	Not reported	Father (n=8), Mother (n=10)
Amorado et al.,	2008	22	38.5	57	Not reported	Father (n=8), Mother (n=14)
Baxter et al.,	2001	98	42.0	Not reported	Not reported	Father (n=41), Mother (n=57)
Bojanić et al.,	2020	359	51.0	Not reported	Not reported	Father (n=183), Mother (n=176)
Boots & Heide.,	2006	226	29.0	Not reported	Not reported	Father (n=66), Mother (n=160)
Bourget et al.,	2007	64	60.0	61.4	Not reported	Father (n=38), Mother (n=26)
Bows et al.,	2019	97	82.0	60-69 (range)	White (64%), Unknown (31%)	Mother and Father
Carabellese et al.,	2014	2	0	Not reported	Not reported	Mother
Catanesi et al.,	2015	9	0	62.3	Not reported	Mother
Cutrim Jr. et al.,	2013	1	100	Not reported	Not reported	Father
Dakhlaoui et al.,	2009	16	50	Not reported	Not reported	Father (n=8), Mother (n=8)
Dantas et al.,	2014	7	85.7	59	Not reported	Father (n=6), Mother (n=1)

Table 2 continued

Author	Year	Number of victims (n)	Gender (% Male)	Age (Mean)	Ethnicity	Relationship to perpetrator
de Borba-Telles et al.,	2017	19	61.2	63.3	Not reported	Father (n=12), Mother (n=7)
Di Vella et al.,	2017	1	100	73	Not reported	Father
Dogan et al.,	2010	1	0	57	Not reported	Mother
d'Orban et al.,	1989	17	17.7	Not reported	Not reported	Father (n=3), Mother (n=14)
Dunjić et al.,	2008	Not reported	54.5	63.7	Not reported	Father and mother
Ellouze et al.,	2017	1	0	Not reported	Not reported	Mother
Fegadel	2014	603	56.2	57.4	White (77%), Black (22%), Asian/Pacific Islander and American Indian/Alaskan Native (<2%)	Father (n=339), Mother (n=264)
Fegadel & Heide,	2015	70	50	56.9	White (94%) Black (6%)	Father (n=35), Mother (n=35)
Fegadel & Heide,	2017	42	45.8	39.5	White (81%) Black (19%)	Father (n=19), Mother (n=23)
Fegadel & Heide,	2018	603	56.2	58.7	White (75%) Black (23%)	Father (n=339)/Mother (n=264)
		3887	55.8	58.4	White (69%) Black (28%)	Father (n=2169)/Mother (n=1718)
Fodor et al.,	2019	2	50	Not reported	Not reported	Father (n=1), Mother (n=1)
Gabison-Hermann et al.,	2010	32	50	Not reported	Not reported	Father (n=16), Mother (n=16)

Table 2 continued

Author	Year	Number of victims (n)	Gender (% Male)	Age (Mean)	Ethnicity	Relationship to perpetrator
Gomide et al.,	2020	39	66.7	Not reported	Not reported	Father (n=26), Mother (n=13)
Gómez-Durán et al.,	2013	Not reported	Not reported	Not reported	Not reported	Not reported
He	2012	242	33.1	Not reported	Black (68.2%) White (24.8%)	Father (n=80), Mother (n=162)
Heide	2013	3118	0	54.81	White (72.1%), Black, (26.1%), American Indian/Alaskan Native, (0.5%) Asian/Pacific Islander (1.2%)	Mother
Heide	2014	5043	100	55.7	98% of fathers killed were White (67%), Black (32%)	Father (n=3,686), Stepfather (n= 1,357)
Heide	2007	5781	55.16	56.3	<i>Fathers:</i> White (67.6%), Black (30.1%), Oriental (1%), Indian (0.8%), Other (0.1), Unknown (0.4%). <i>Mothers:</i> White (75%), Black (22.6%), Oriental (1.1%), Indian (0.5%), Other (0.2%), Unknown (0.3%)	Father (n=3189)  Mother(n=2592)
Hellen et al.,	2015	2	0	83	Not reported	Mother
Holcomb	2000	2	0	Not reported	Not reported	Mother
Holt	2017	693	51.0	60.5	White (84%), Black (8%), Asian (7%)	Father (n=353), Mother (n=340)
Hubbell et al.,	2000	46	49.4	54.1	Not reported	Father (n=22), Mother (n=23)

Table 2 continued

Author	Year	Number of victims (n)	Gender (% Male)	Age (Mean)	Ethnicity	Relationship to perpetrator
Hubbell et al.,	2021	67	47.1	54	<i>Fathers: White (91%), black (9%), Asian (0%). Mothers: White (86%), black (11%), Asian (1%).</i>	Fathers (n=41), mothers (n=46)
Kolsi et al.,	2021	3	0	Not reported		Mother
Lauerma et al.,	2010	1	0	Not reported	Not reported	Mother
Le Bihan et al.,	2004	49	Not reported	Not reported	Not reported	Father (n=20), Mother (n=49)
Le Bihan et al.,	2012	44	45.5	Not reported	Not reported	Father (n=20), Mother (n=24)
Lee et al.,	2017	Not reported	Not reported	Not reported	Not reported	Not reported
Leveillee et al.,	2010	Not reported	Not reported	61.9	Not reported	Mothers and fathers
Liettu et al.,	2009	192	55.2	Not reported	Not reported	Father (n=106), Mother (n= 86)
Maas et al.,	1984	2	50.0	Not reported	Not reported	Father (n=1), Mother (n=1)
Manujantarat et al.,	2021	Not reported	100	Not reported	Not reported	Unclear
Marleau et al.,	2006	Not reported	56%	Not reported	Not reported	Mothers and Fathers
Menezes	2010	39	47.8	60	100% African	Fathers (n=19), Mothers (n=20)
Millaud et al.,	1996	12	50.0	Not reported	Not reported	Fathers(n=6), Mothers (n=6)
Moen & Shon	2020a	46	Not reported	44	Not reported	Mothers and Fathers

Table 2 continued

Author	Year	Number of victims (n)	Gender (% Male)	Age (Mean)	Ethnicity	Relationship to perpetrator
Moen & Shon	2020b	74	45.0	49	Not reported	Fathers (n=33), Mothers (n=41)
Mills & Kivisto	2022	8916	58.8	Not reported	not reported	41.2% mothers, 58.8 fathers
Newhill	1991	5	40.0	Not reported	Not reported	Father (n=2), Mother (n=2), Grandmother (n=1)
Pertoni et al.,	2022	1	0	Not reported	Not reported	Mother
Jargin	2013	3	66.7	Missing data	Not reported	Father (n=1), Mother (n=2)
Jung et al.,	2014	338	48.2	Not reported	Not reported	Father (n=163), Mother (n=175)
Novović et al.,	2013	2	50.0	Not reported	Not reported	Father (n=1), Mother (n=1)
Ogunwale et al.,	2012	2	0	Not reported	Not reported	Mother
Orellana et al.,	2013	1	0	Not reported	Not reported	Mother
Oueslati et al.,	2018	2	100	Not reported	Not reported	Father
Raymond et al.,	2020	4	50	Not reported	Not reported	Father (n=2), Mother (n=2)
Raymond et al.,	2015	Not reported	Not reported	Not reported	Not reported	Father (40%), Mother (50%), Parental couple (7.5%)
Sadoff	1971	3	Not reported	Not reported	Not reported	Not reported



*Table 2 continued*

Author	Year	Number of victims (n)	Gender (% Male)	Age (Mean)	Ethnicity	Relationship to perpetrator
Sahin et al.,	2016	Not reported	54.5%	Not Reported	Not reported	Mothers and Fathers
Teixeira et al.,	2012	1	0	Not reported	Not reported	Mother
Trotta et al.,	2020	1	100	61	Not reported	Father
Valença et al.,	2009	Not reported	0	Not reported	Not reported	Mother
Valença et al.,	2021	2	50	Not reported	Not reported	Father (n=1), Mother (n=1)
Viñas-Racionero et al.,	2017	42	45.2	36	Caucasian (71.43 %), African American (23.81 %), Unknown (4.76 %)	Parents and siblings (31.25 %); parents and other family members such as grandparents, uncles, or cousins (12.5 %); mother, mother's partner, and the offender's child (6.25 %); only children (6.25 %); and only parents if no siblings were in the family (43.75 %)
West & Feldsher,	2010	Not reported	0	Not reported	Not reported	Mother
Wick et al.,	2008	11	0	61	Not reported	Mother

## *Discussion*

### ***Synthesis of Findings***

This review aimed to identify all empirical regarding parricide perpetrators and victims to identify the causes, drivers, and aggravating factors of parricide, including family dynamics and perpetrator psychopathology, methods of killing, and whether these differed by age and sex the perpetrator and victim(s). The qualitative synthesis revealed five main factors that consistently appeared in the literature as causes, drivers and aggravating factors of parricide including, family dynamics, psychopathology, methods of abuse, and perpetrator characteristics including, gender, age, substance use, previous experiences of abuse and relationship between perpetrator and victim.

Results from the qualitative synthesis demonstrated that family dynamics serves as an aggravating factor in parricide. However, these dynamics varied somewhat, depending on the gender of both the victim and perpetrator. It was found that in cases of matricide, most mothers were typically described as domineering, demanding, and interfering, and the relationship between mother(s) and their child tended to be pathological (Catanesi et al., 2015; Gómez-Durán et al., 2013; Holcomb, 2000, Newhill., 1991; Sadoff 1971; West & Feldsher, 2010; Ogunwale et al., 2012). However, further exploration of qualitative findings regarding family dynamics as an aggravating factor in parricide revealed significant gender differences between family dynamics, which different dynamics between fathers and sons and mothers and sons, as well as between fathers and daughters and mothers and daughters (Sadoff, 1971; d'Orban & O'Connor, 1989; Gomez-Duran et al., 2013; Catanesi et al., 2015; Aguilar, 2019).

In cases of matricide, in which a son was the perpetrator, a pathological yet synchronous relationship between overindulgent mothers and dependent sons was apparent (Maas et al., 1984; Newhill, 1991). Within this, male perpetrators of matricide were often labelled as dependent and immature (Newhill,1991; West & Feldsher, 2010). It could be suggested that the son's characteristics may have driven the pathological co-dependency with their overindulgent mother(s). This family dynamic seemed to result from the desire of the mother to indulge their son and the mutual desire of the son to be indulged, which was reflected by the son's excessive dependence on their mother and their immaturity (Green, 1981; West &

Feldsher, 2010). Although these distinct dynamics between mothers and sons were highlighted, the same dynamics were not observed between mothers and daughters.

Female perpetrators of matricide tended to have a volatile relationship with their mothers, characterised by hostility and conflict (West & Feldsher, 2010). It is worth mentioning that this phenomenon has not been explored in existing research. However, in some cases, whilst no specific dynamics between mothers and daughters were described, it did appear that females did not usually target their abuse towards fathers (Di Vella et al., 2017; Dogan et al., 2010; d'Orban & O'Connor, 1989; Hellen et al., 2015; Orellana et al., 2013); even when they had been a victim of sexual abuse by the father; they killed their mother instead (Moen & Shon, 2020c). This can be explained in terms of 'failure to protect', whereby the mother failed to protect her daughter from abuse. In turn, the daughter has sought revenge for her mother's lack of protection rather than retribution for the abuse they experienced by their father. Whilst the qualitative synthesis has revealed interesting findings regarding the family dynamics between mothers and their children in cases of matricide, it seemed pertinent to explore the dynamics between fathers and their children in cases of patricide.

In cases of patricide, fathers were typically described as being either explosive and physically violent (Maas et al., 1984; Newhill, 1991; Manujantararat et al., 2021) or passive and negligent (Holcomb, 2000; West & Feldsher, 2010). However, it does seem appropriate to mention that although males appeared most likely to commit parricide against both mothers and fathers, in cases where parricide perpetrators were female, the father was less likely to be the victim (Di Vella et al., 2017; Dogan et al., 2010; d'Orban & O'Connor, 1989; Hellen et al., 2015; Orellana et al., 2013). There seems to be a lack of research investigating this phenomenon, and further research is needed to understand this dynamic's complexity fully. Nevertheless, in all cases of patricide, there appeared to be a cruel and bizarre relationship between father(s) and their son that was at best described as ambivalent (Sadoff, 1971).

The contrast between family dynamics in matricide and patricide are interesting and highly significant when considering the aggravating factors involved in patricide, yet little research has been conducted to investigate the underpinning reasons for this distinction. Irrespectively, in all cases of parricide, regardless of the gender of the victim and perpetrator, it can be suggested that pathological relationships between children and their parent/s act as

an aggravating factor for parricide (Green, 1981; Maas et al., 1984; Newhill, 1991; West & Feldsher, 2010). However, it is unlikely that family dynamics alone would cause an individual to commit parricide, given the myriad of variables that seem to be involved.

It became apparent from the literature that females were at a greater risk for matricide than males were of patricide (Adinkrah, 2018; Aguilar, 2019; Amorado et al., 2008; Baxter et al., 2001; Boots et al., 2006; Carabellese et al., 2014; Catanesi et al., 2015; Dogan et al., 2010; d'Orban & O'Connor, 1989; Ellouze et al., 2017; Fegadel & Heide, 2017; He, 2012; Heide, 2013; Hellen et al., 2015; Holcomb, 2000; Hubbell et al., 2000; Lauerma et al., 2010; Le Bihan et al., 2012; Menezes, 2010; Moen & Shon, 2020c; Newhill, 1991; Jung et al., 2014; Ogunwale et al., 2012; Orellana et al., 2013; Teixeira et al., 2012; Valença et al., 2009; Viñas-Racionero et al., 2017; West & Feldsher, 2010; Wick et al., 2008). However, the reasons for this are currently unknown. That said, whilst there seemed to be distinct gender differences between perpetrators and victims of parricide, a relationship between the gender and age of parricide perpetrators emerged.

Male perpetrators were typically younger than female perpetrators and were generally in their late twenties or early thirties when they committed parricide. In comparison, female parricide offenders were typically in their late thirties when they committed parricide (Di Vella et al., 2017; Dogan et al., 2010; d'Orban & O'Connor, 1989; Hellen et al., 2015; Orellana et al., 2013; Gomide et al., 2020). However, in cases of parricide stemming from carer burnout, perpetrators of parricide were typically female but were approximately 50 years old (Hellen et al., 2015), which is understandable as older children are more likely to have parents with significant support needs. That said, carer burnout seems to have different motivations to other types of parricide. The overarching theme in most cases of parricide is retribution or revenge, whether that is misdirected towards parents due to psychosis (Newhill, 1991; Liettu et al., 2009, or a result of animosity stemming from childhood abuse. However, in cases of carer burnout, parricide served as an attempt to end suffering, either for themselves or their parent/s, rather than to seek retribution (Hellen et al., 2015). However, this phenomenon is significantly under-researched. As a result, the underlying dynamics and aggravating factors involved are unknown.

Regardless of the gender of the perpetrator, it was evident from the literature that the majority of parricide victims were females (Adinkrah, 2018; Aguilar, 2019; Amorado et al., 2008; Baxter et al., 2001; Boots et al., 2006; Carabellese et al., 2014; Catanesi et al., 2015; Dogan et al., 2010; d'Orban et al., 1989; Ellouze et al., 2017; Fegadel & Heide, 2017; He, 2012; Heide, 2013; Hellen et al., 2015; Holcomb, 2000; Hubbell et al., 2000; Lauerma et al., 2010; Le Bihan et al., 2012; Menezes, 2010; Mills & Kivisto, 2022; Moen & Shon 2020c; Newhill, 1991; Jung et al., 2014; Ogunwale et al., 2012; Orellana et al., 2013; Teixeira et al., 2012; Valença et al., 2009; Viñas-Racionero et al., 2017; West et al., 2010; Wick et al., 2008). That said, some research findings suggest that male victims were more at risk (Heide & Petee, 2007; Hubbell et al., 2021). However, despite conflicting findings, there seems to be little research explaining why mothers may be at a greater risk than fathers and vice versa.

When considering the perspective of parricide perpetrators, a substantial number of perpetrators reported that they had experienced childhood abuse at the hands of their parents. Further exploration into this phenomenon suggested that childhood abuse was frequently reported by perpetrators of parricide, with most offenders, regardless of gender, reporting multiple types of abuse. Abuse types reported by perpetrators included physical, emotional and sexual abuse (Aguilar, 2019; Amorado et al., 2008; Bojanić et al., 2020; Catanesi et al., 2015; Cutrim Jr. et al., 2013; Dakhlaoui et al., 2009; Dantas et al., 2014; de Borba-Telles et al., 2017; Dogan et al., 2010; d'Orban & O'Connor, 1989; Gómez-Durán et al., 2013; Gomide et al., 2020; Hubbell et al., 2000; Lauerma et al., 2010; Le Bihan et al., 2004; Manujantararat et al., 2021; Marleau et al., 2006; Newhill, 1991; Novović et al., 2013; Raymond et al., 2020; Raymond et al., 2015; Sadoff, 1971; Viñas-Racionero et al., 2017). This is consistent with Heide's 'severely abused' typology (Heide, 2017). In these cases, children may perceive the world as an overwhelming and violent place; hence the act of parricide is believed to be committed out of desperation (Heide, 2017).

Although Heide's severely abused typology (Heide, 2017) was developed from juvenile parricide perpetrators, the same logic could be applied to adult perpetrators, but further research may be needed to establish the validity of Heide's severely abused typology (Heide, 2017) in adult parricide perpetrators. Nevertheless, we understand that childhood abuse can have lasting consequences. Therefore, it seems unsurprising that adults may later commit

parricide, but the motivations for parricide in child abuse cases are unclear, with some findings suggesting that they stem from a desire for retribution, revenge (Moen & Shon, 2020b). That said, it is not implausible that some perpetrators are trying to seek safety from their abusers, which in cases of parricide, is usually their parents (Rowe, 2006).

Nevertheless, research has highlighted the association between child abuse and mental illness. Therefore, it is unsurprising that all the articles that reported the perpetrator's previous experiences of abuse also reported perpetrator mental illness (Aguilar, 2019; Amorado et al., 2008; Bojanić et al., 2020; Catanesi et al., 2015; Cutrim Jr. et al., 2013; Dakhlaoui et al., 2009; Dantas et al., 2014; de Borba-Telles et al., 2017; Dogan et al., 2010; d'Orban & O'Connor, 1989; Gómez-Durán et al., 2013; Hubbell et al., 2000; Lauerma et al., 2010; Kolsi et al., 2021; Le Bihan et al., 2004; Marleau et al., 2006; Newhill, 1991; Novović et al., 2013; Petroni et al., 2022; Raymond et al., 2020; Raymond et al., 2015; Sadoff, 1971; Viñas-Racionero et al., 2017). As a result, mental illness also seems to play a significant role in perpetuating parricide.

The most frequently mentioned mental illnesses in the identified literature were psychotic-, affective- and personality disorders, with schizophrenia and psychosis being the most reported mental illnesses in parricide perpetrators. In cases involving schizophrenia and psychosis, delusions that are persecutory towards the parent seem to play a causal role in parricide (Chamberlain, 1986; Kolsi et al., 2021; Lipson et al., 1986; Litteu et al., 2009; Ogunwale et al., 2012; Petroni et al., 2022; Novovic et al., 2013; Jung et al., 2014; Valença et al., 2021). Similarly, for affective disorders, the cause of the murder seemed to result from acute paranoid delusions (Mareau et al., 2006; Trotta et al., 2020), which, like schizophrenia and psychosis, seemed to be persecutory towards the parent. However, personality disorders, particularly borderline and antisocial, were frequently reported (Baxter et al., 2001; Catanesi et al., 2015; de Borba-Telles et al., 2017; d'Orban & O'Connor, 1989; Dunjić et al., 2008; Hellen et al., 2015; Holcomb, 2000; Le Bihan et al., 2012; Lee et al., 2017; Leveillee et al., 2010; Liettu et al., 2009; Marleau et al., 2006; Menezes, 2010; Millaud et al., 1996; Newhill, 1991; Novović et al., 2013; Raymond et al., 2015; Sahin et al., 2016). That said, when considering personality disorders, their role in parricide was less salient than that of schizophrenia and psychosis.

Currently, virtually no research has attempted to understand the relationship between personality disorders and parricide beyond a propensity for aggressive outbursts.

Those with antisocial personality disorder typically demonstrate a lack of regard for morality, yet it could be argued that any murderer displays a lack of regard for morality. This raises the question of whether antisocial personality disorder in itself is a cause of parricide or whether it is an aggravating factor, which, when coupled with their situational factors, serves as a driver? Similarly, with borderline personality disorder, whilst aggressive outbursts are not unheard of, these individuals often demonstrate an intense fear of real or imagined abandonment. Therefore, the act of parricide seems counterintuitive. That said, our current understanding of borderline personality disorder also highlights the presence of intense emotionality and reactions that are seemingly disproportionate to the triggering event. So, in this regard, it seems apparent why those with borderline personality disorder may be somewhat overrepresented as parricide perpetrators. Nonetheless, further research is required to consider these disorders in greater depth to ascertain their role in parricide and understand why individuals with these psychopathologies may be at a greater risk of committing parricide. Still, mental illness seems to play a significant role in parricide offenders, but there are further complexities when the substance use of perpetrators is considered alongside mental illness.

In most studies that reported mental illness, substance use was also reported. Whilst there is an abundance of literature suggesting that most parricide offenders have a history of substance use, there is little evidence to suggest that parricide perpetrators were typically intoxicated at the time of the offence (Holt, 2017). This is consistent with Gabrielsen, Gottlieb and Kramp (1992), who found that those involved in intra-family homicide were generally older and less often intoxicated compared to those who killed people outside of their family. Indeed, research has generally found that the association between fatal violence and having schizophrenia is not explained by comorbid substance abuse (Bennett, Ogloff and Mullen et al., 2011). In the current review, Holcomb (2000) and Holt (2017) found that many parricide offenders were not intoxicated at the time of the offence. This is consistent with the frequent premeditation shown by these parricide offenders (Moen & Shon, 2020b; Viñas-Racionero et al., 2017), which brings us to the motivations of parricide offenders.

In cases of parricide, the offence itself tended to be triggered by several situational factors. However, the most common factor seemed to be psychotic episodes which have already been discussed previously (Bourget et al., 2007; Carabellese et al., 2014; Cutrim Jr et al., 2013; Dogan et al., 2010; d'Orban & O'Connor, 1989; Ellouze et al., 2017; Fodor et al., 2019; Gabison-Hermann et al., 2010; Liettu et al., 2009, Maas et al., 1984; Teixeira et al., 2012; Valença et al., 2009). However, the living arrangements between parent/s and child also seemed to be a significant factor in the perpetration of parricide.

Studies highlighted that parents were at a greater risk of parricide when they shared their home with their child (d'Orban et al., 1989; Le Bihan et al., 2004; Le Bihan et al., 2012; Leveillee et al., 2010; Millaud et al., 1996; Trotta et al., 2020; Raymond et al., 2020; Raymond et al., 2015; West & Feldsher, 2010), which in of itself may not be overly relevant. However, arguments between parent and child also seemed to be a significant trigger for parricide (Moen, 2020a; Moen, 2020b), as did financial issues (Dantas et al., 2014). Therefore, the literature does seem to indicate that no single factor is a cause of parricide, but instead, certain combinations of factors seem to increase an individual's propensity for parricide. That said, the literature also suggested that both neglect and carer burnout, or the inability for the child to continue caring for their parent, was also a trigger for parricide (Gómez-Durán et al., 2013; Hellen et al., 2015). Although most situational factors mentioned above do not seem to be as heavily involved, there were no financial motivations or apparent disputes. Therefore, more research is required to understand the situational factors beyond that of suffering, either on the part of the parent, child, or both, that may lead a perpetrator to commit parricide in these circumstances.

All the situational factors cannot be considered causes of parricide or even aggravating parricide factors when considered standalone constructs. Instead, the findings indicate that parricide results from a combination of factors, including family dynamics, psychopathology, and substance misuse, that may be exasperated by specific situational factors which drive the perpetrator to commit parricide. Despite the situational factors that contributed to parricide, the methods of killing in parricide cases were mixed.

In most parricide cases, the perpetrator used weapons, including blunt objects or sharp instruments (Holt, 2017; Hubbell et al., 2000; Menezes, 2010; Sahin et al., 2016). Although



the use of firearms was reported, this tended to be more frequent in American cases (Heide, 2013; Heide, 2014; Heide, 2007; Fegadel, 2014; Fegadel & Heide, 2015; Fegadel & Heide, 2017; Fegadel & Heide, 2018), compared to cases that occurred elsewhere. This may be due to American firearm laws and accessibility. Nevertheless, other weapons were frequently used by perpetrators to kill their parents, but in many cases, the weapon choice seemed to be one of convenience and accessibility at the time of the offence (Moen & Shon, 2020a; Moen & Shon, 2020b). This suggests that parricide was generally unplanned and resulted from the situational factors discussed previously rather than premeditated. However, this suggestion contradicts the frequent premeditation previously reported (Moen & Shon, 2020b; Viñas-Racionero et al., 2017). Nevertheless, in most parricide cases, regardless of the perpetrator or victim's gender, psychopathology or specific family dynamics, excessive force was used, and overkill was commonly reported (Amorado et al., 2008; Dogan et al., 2010; Hubbell et al., 2000; Lauerma et al., 2010; Leveillee et al., 2010; Teixeira et al., 2012; Trotta et al., 2020; West & Feldsher, 2010). However, existing research suggests that no significant association exists between overkill in parricide compared to murders committed against non-family members (Reynolds, Estrada-Reynolds & Freng et al., 2019). Nevertheless, the same findings support the suggestion that overkill does not differ between the gender of perpetrators (Reynolds et al., 2019).

### ***Limitations of Evidence***

While this review has highlighted some interesting findings, it is not without limitations. Firstly, the total sample size included in this review was relatively small. This was due to the stringent inclusion criteria and the rarity of the phenomenon of interest. Parricide is extremely rare, and researchers are forced to rely on small sample sizes and case study designs. In addition, it would be impossible to investigate parricide prospectively, which further limits the ability of researchers to investigate victimology and family dynamics as intensely as is possibly required to develop a complete understanding of parricide.

### ***Conclusions and Future Directions***

From the evidence identified in this review, several significant observations were found. Firstly, it can be concluded that parent-to-child abuse is an aggravating factor that may lead to parricide. Moreover, whilst not necessarily abusive, parenting styles, specifically negligent and authoritarian, may increase the risk of parricide, mainly where the parent-child

relationship is pathological and characterised by hostility and dependency. However, understanding the specific role of family dynamics in parricide requires substantial research to consider the many caveats discussed in this review.

When considering aggravating factors of parricide, a history of drug use is common amongst parricide perpetrators. However, it is unclear whether substance use is an aggravating factor in parricide cases, as most parricide perpetrators are not intoxicated at the time of the murder. Although it does appear that alcohol may contribute to parricide under specific circumstances, this tended to be the exception to the norm. Regardless, future research may benefit from focusing more specifically on the intricate link between mental illness and substance use and possibly substance use and childhood abuse to gain an informed perspective of the specific role of substance use in parricide.

Although mental illness appears to play a significant role in parricide and has gained significant support from the research community concerning schizophrenia and delusional disorders, future research is needed to establish how other mental illnesses are involved in parricide. Suppose it were simply the case of an increased propensity for aggressive outbursts. In that case, it is unclear why only bipolar disorder, borderline and antisocial personality disorders consistently reappear in literature, as aggressive outbursts are characteristic of several mental and physical illnesses. Therefore, future research is required to understand the complex relationship between these disorders and their contribution to parricide.

## Method

A secondary source design was used to sample police cases involving domestic abuse and CPDA. Coverage of both contexts was important in the current study, mainly to understand how the dynamics in CPDA differed from those in domestic abuse more widely. Whilst the project initially aimed to provide three core elements of analysis, the project went above and beyond its initial scope to provide a comprehensive and holistic understanding of CPDA. The work was expanded beyond its initial scope due to the need to address the policy gap regarding CPDA in adult relationships, a problem emanating from years of under-research.

As such, the work covers some core key questions regarding CPDA, and provides important findings to inform police practice and policy at a national, and possibly international, level.

These key areas include:

- The overall CPDA demand processed by police, as well as the composition of demographics across these cases and how they differ to domestic abuse more broadly.
- CPDA trends during the pandemic, and how they compare to wider domestic abuse.
- A cluster analysis across 3 years of police recorded cases to understand the different 'types' of CPDA and how these change over time.
- A Psychological Contextualisation of cases using a systematic literature review informed psychological assessment, identifying traits and possible conditions afflicting suspects (and wider persons) who commit CPDA.
- And a deeper understanding of prolific CPDA networks, top offenders, and (attempted) parricide cases in Lancashire.

## Data Extraction

Lancashire Constabulary uses CONNECT to store POLE (People, Objects, Location and Event) data. All Domestic Abuse Crimes and Incidents recorded between the dates 27/11/2018 and 26/11/2021 were extracted from CONNECT using SQL Server Management Studio. Cancelled crimes were removed from the dataset.

A Domestic Abuse Crime is where there is a Primary Notifiable crime with an included Domestic Abuse investigation attached. A Domestic Abuse Incident extracted from CONNECT

is a reported incident that has been subsequently followed up by the police for further action (for example, they require a risk assessment to be conducted) but is not attached to a Notifiable crime. Also of note, that fields some fields are not mandatory in CONNECT and therefore can be left blank. In the data extractions NULL values were returned for fields with missing data.

In total, three data extracts were provided, each of which contained slightly different information for the research team. The first extract contained all Domestic Abuse crimes/incidents recorded within the three-year period with the data covering Incident/Crime details for Location, Offence type and Outcomes were provided. In more detail, the data concerned an extract of the Incident Number (Unique to each Crime/Incident), Recorded Date, Committed From/To Date/Time, Home Office Crime Group (HOCR), HOCR Sub-Group, HOCR lower Sub-Group, Primary Offence (Short Title), Included Offences, Home Office Code, Home Office Sub-Code, Crime Outcome, Outcome Category, Investigation Finalisation Type, Reporting Method, BCU (Base Command Unit), Town, Partial Postcode, Premises Type, Risk Rating History, Risk Assessment Type and DASH Questions with Answers.

In addition to the crime, object and location data, the extract also included fields relating to the suspect and victim, including: Iteration Group (Unique Person ID), Gender – Officer Defined, Age, Ethnicity – Officer Defined, Ethnicity – Self Defined, Relationship of the suspect to the victim, and an indicator field which shows when the victim is 16 or more years older than the suspect.

The second extract provided by the police was a subset of the first extract and concerned an extract across all of the same fields. Upon initial extraction, the analysts noted that there appeared to be cases where officers had entered relationships the opposite way to which they were intended. Therefore, the data was filtered in two stages, firstly by identifying cases with specific relationship types that indicated CPDA (left column of Table 3), and then where the relationship labels indicating CPDA were reversed but an age filter indicated that the victim that was 16 years older than the suspect. Therefore, in addition to the fields directly relating to CPDA (left column of Table 3), the extract also included relationships where the victim was the child, but the age indicated that the victim was older (expanded labels can be

seen in the right column of Table 3). This data was considered the ‘Child to Parent Domestic Abuse’ extract.

Table 3: Relationships used to extract Child to Parent Domestic Abuse (CPDA).

Included all Crimes/Incidents with the following relationships	Included the following relationships if victim ≥ 16 years older than suspect
<ul style="list-style-type: none"> <li>- Daughter</li> <li>- Dependent</li> <li>- Grandchild</li> <li>- Great Grandchild</li> <li>- Nephew</li> <li>- Niece</li> <li>- Son</li> <li>- Step Daughter</li> <li>- Step Son</li> <li>- Adopted Child</li> <li>- Adopted daughter</li> <li>- Adopted Grandchild</li> <li>- Adopted granddaughter</li> <li>- Adopted grandson</li> <li>- Child</li> <li>- Child-In-Law</li> <li>- Daughter-in-law</li> <li>- Ex Foster Child</li> <li>- Ex-Child In Law</li> <li>- Ex-daughter-in-law</li> <li>- Ex-son-in-law</li> <li>- Foster Child</li> <li>- Granddaughter</li> <li>- Grandson</li> <li>- Half-daughter</li> <li>- Half-son</li> <li>- Niece / Nephew</li> <li>- Son-in-law</li> <li>- Step Child</li> <li>- Step-Grandchild</li> <li>- Step-granddaughter</li> <li>- Step-grandson</li> </ul>	<ul style="list-style-type: none"> <li>- Invalid</li> <li>- Not Recorded</li> <li>- Ex Foster Parent</li> <li>- Father</li> <li>- Foster Parent</li> <li>- Grandparent</li> <li>- Great Grandparent</li> <li>- Guardian</li> <li>- Mother</li> <li>- Relationship Unknown</li> <li>- Step Parent</li> <li>- Adopted Father</li> <li>- Adopted Grandfather</li> <li>- Adopted Grandmother</li> <li>- Adopted Grandparent</li> <li>- Adopted mother</li> <li>- Adopted Parent</li> <li>- Grandfather</li> <li>- Grandmother</li> <li>- Half-Parent</li> <li>- Parent</li> <li>- Step-father</li> <li>- Step-grandfather</li> <li>- Step-grandmother</li> <li>- Step-Grandparent</li> <li>- Step-mother</li> </ul>
	<p>(This second list covers all possibilities that the officer has input the relationship the wrong way around)</p>

The third extract took all the unique CPDA suspects and found all other Crimes and Incidents where they had been a suspect within the time period. This extract contained the same fields as above without the Risk Assessment fields.

### ***Data Processing***

The quantitative data was processed using the ARC crime analytics platform. Initial processing converted the raw data into a standardised and consistent format for research and analytical purposes. This involved amending field names and categorical data into standard forms. It also involved augmenting the data using both additional fields attainable from within the data (e.g., crimes to date and flags to indicate violence against women and girls etc.), as well as data from external sources linked to dates or locations (e.g., the Covid19 lockdown situation for each date and location data involved demographic details based on the postcode district such as deprivation and population statistics<sup>1</sup>).

The CPDA dataset was also subject to deeper data quality checks as it was the main focus of the research project. The initial extraction included 10,484 rows of data. This extract was refined for the following issues: 1) de-duplication, 2) removal of cases where the age gap was less than 16 years, and 3) removal of cases where the suspect was younger than 16 years of age. This refined the extract to a total 9,544 rows of data, which each row representing a unique case of CPDA.

From this point, there were further evident data entry issues to be corrected. This included:

- Correcting cases where the relationship between offender and victim was clearly reversed. A total of 129 cases were amended (1.4% of the total 9,544 cases).

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<sup>1</sup> Initially, output areas were added to the postcode sector using the lookups provided at: [Output Area to Postcode Sector \(December 2011\) Lookup in England and Wales - data.gov.uk](https://data.gov.uk/dataset/output-area-to-postcode-sector-december-2011-lookup-in-england-and-wales)  
Population information was added using output area lookups provided by Office of National Statistics: [Output Areas \(December 2011\) Population Weighted Centroids | Open Geography Portal \(statistics.gov.uk\)](https://statistics.gov.uk/open-geography-portal/output-areas-december-2011-population-weighted-centroids)  
The relevant LSOA was added using the OA to LSOA lookup at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/lowersuperoutputareamidyearpopulationestimates>

- Cases where crime types were missing as a result of the extraction procedure. A total of 413 cases were corrected (4.3% of the total 9,544 cases).

## **Data Analysis**

The CPDA data was prepared for clustering using the Arc crime analytics platform<sup>2</sup>. by:

- Extracting the last incident/crime for each offender within the time window. This resulted in a sample size of  $n = 5,398$ .
- Computing the number of events to date for each crime type during the time window up to that point. This included all crimes for the offender which in some cases may have not have been CPDA, or even DA at all but could involve more general criminality such as shop lifting or public order offences.
- Coding categorical features such as gender and the yes/no responses to the DASH questions into dummy variables (dropping the first encoding for non-binary categories).

## **Cluster Analysis**

The data was clustered using the  $k$ -means method within Scikit-learn. The choice of  $k$  was based on review of the silhouette coefficient and the classical 'elbow method', but the research team were also mindful of real world practical issues, such as operational convenience and cluster sizes. On this basis a  $k$  value of 4 was considered optimal.

Initial clustering results showed that some features were unduly influencing cluster formation. This occurred when very small numbers of individuals displayed a feature but this was a key characteristic of a small cluster. An example of this was individuals whose gender was not provided, as this formed a distinct small cluster where this dynamic was the only unique feature differentiating them from others. In order to handle this issue, cases where

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<sup>2</sup> Arc uses numerous python libraries including:

Scikit-learn: <https://scikit-learn.org/stable/about.html>

NetworkX: <https://networkx.org/documentation/networkx-1.10/reference/citing.html>

Pandas: <https://pandas.pydata.org/about/citing.html>

NumPy: <https://numpy.org/citing-numpy/>

SciPy: <https://scipy.org/citing-scipy/>

the suspect did not have a gender recorded were dropped. However, this process was conservative as it only dropped suspects when there were 2+ instances and all of these instances did not have a gender recorded (as the research team believed there may have been a reason why the suspect's gender had not recorded in multiple instances). The deletion of cases where the suspect did not have a recorded gender resulted in a reduction instances from 9,544 to 8,920 cases. This meant the deletion of 624 cases across 509 suspects.

A review of other rare features indicated that a degree of over fitting was evident. This is not surprising given the relatively large number of features across the relatively limited sample size. Clusters were therefore reformed after removing features where less than  $n\%$  of the sample displayed the characteristic where  $n$  was varied over a range of 0.05% to 2%. This resulted in better formed clusters, with optimal clusters being formed when  $n$  was set to 1%.

The final feature set included 92 variables. Values of each feature for each nominal were compared using a 1 one-way anova with four levels (one per cluster). This resulted in significance levels for each cluster as shown in Table 4.

Table 4: One-way ANOVA examining the differences in features across the four clusters

	<b>Feature</b>	<b>F</b>	<b>p</b>
<b>1</b>	Offender age when crime committed	1.24	=.29
<b>2</b>	Age gap	0.3704	=.77
<b>3</b>	Are you very frightened	1450.598	<.01
<b>4</b>	Does abuser(s) constantly text, call, co	147.3709	<.01
<b>5</b>	Has the abuser(s) ever threatened to hur	142.3127	<.01
<b>6</b>	Does the abuser(s) do or say things of a	24.6609	<.01
<b>7</b>	Are you feeling depressed or having suic	414.0831	<.01
<b>8</b>	Have you separated or tried to separate	91.3405	<.01
<b>9</b>	Are you currently pregnant or have you r	0.8279	=.48
<b>10</b>	Has the current incident resulted in inj	76.9737	<.01
<b>11</b>	Has the abuser(s) ever hurt the children	111.1198	<.01
<b>12</b>	Are there any children, step-children th	55.8659	<.01
<b>13</b>	Has the abuser(s) ever breached bail/inj	177.1524	<.01
<b>14</b>	Is there conflict over child contact	7.8053	<.01
<b>15</b>	What are you afraid of	1620.35	<.01
<b>16</b>	Do you feel isolated from family/friends	752.8478	<.01
<b>17</b>	Do you know if the abuser(s) has hurt an	471.2896	<.01
<b>18</b>	Is the abuse getting worse	929.1894	<.01
<b>19</b>	Has the abuser(s) ever used weapons or o	251.7777	<.01
<b>20</b>	Is there any other person that has threa	32.8163	<.01
<b>21</b>	Has the abuser(s) ever threatened or att	394.1344	<.01



22	Do you know if the abuser(s) has ever be	749.9724	<.01
23	Is the abuse happening more often	834.5546	<.01
24	Has the abuser(s) ever mistreated an ani	196.7635	<.01
25	Has the abuser(s) had problems in the pa	755.3356	<.01
26	Has the abuser(s) ever threatened to kil	400.1166	<.01
27	Does the abuser(s) try to control everyt	773.0909	<.01
28	Has the abuser(s) ever attempted to stra	109.573	<.01
29	Are there any financial issues	274.6211	<.01
30	Aggravated burglary - Business and Community to date	8.0068	<.01
31	Aggravated burglary in a dwelling to date	16.999	<.01
32	Aggravated vehicle taking to date	19.2997	<.01
33	Arson and criminal damage to date	154.7306	<.01
34	Arson endangering life to date	16.913	<.01
35	Arson not endangering life to date	12.4428	<.01
36	Assault with injury to date	454.1508	<.01
37	Assault with intent to cause serious harm to date	71.2902	<.01
38	Assault without injury to date	527.0629	<.01
39	Assault without injury on a constable to date	11.8044	<.01
40	Attempted burglary - Residential to date	21.3608	<.01
41	Attempted murder to date	3.7047	=.01
42	Blackmail to date	8.1564	<.01
43	Child abduction to date	2.8384	=.04
44	Controlling or Coercive Behaviour to date	42.0588	<.01
45	Criminal damage - Residential to date	205.3184	<.01
46	Criminal damage to a building - Business and Community to date	14.8088	<.01
47	Criminal damage to a vehicle to date	130.422	<.01
48	Cruelty to Children/Young Persons to date	5.4393	<.01
49	Exposure and voyeurism to date	10.1807	<.01
50	Harassment to date	331.8802	<.01
51	Interfering with a motor vehicle to date	20.6033	<.01
52	Kidnapping and False Imprisonment to date	25.3005	<.01
53	Malicious Communications to date	266.0471	<.01
54	Non crime incident to date	812.9681	<.01
55	Other notifiable offences to date	0.2311	=.88
56	Other offences against the State or public order to date	9.4024	<.01
57	Other theft to date	114.1885	<.01
58	Perverting the course of justice to date	8.0961	<.01
59	Possession of article with blade or point to date	25.4455	<.01
60	Possession of firearms with intent to date	1.8588	.13
61	Possession of other weapons to date	27.9425	<.01
62	Public fear, alarm or distress to date	372.5774	<.01

63	Racially or religiously aggravated assault without injury to date	29.4694	<.01
64	Racially or religiously aggravated public fear, alarm or distress to date	46.7573	<.01
65	Rape of a female aged 16 and over to date	24.4676	<.01
66	Rape of a female child under 13 to date	2.0176	.12
67	Rape of a female child under 16 to date	2.1439	.09
68	Robbery of personal property to date	87.131	<.01
69	Sexual activity involving a child under 13 to date	13.0515	<.01
70	Sexual activity involving child under 16 to date	17.2312	<.01
71	Sexual assault on a female child under 13 to date	1.6134	=.18
72	Sexual assault on a male aged 13 and over to date	1.9659	=.12
73	Sexual assault on a male child under 13 to date	7.4221	<.01
74	Shoplifting to date	28.1687	<.01
75	Stalking to date	209.3833	<.01
76	Theft - Making Off Without Payment to date	16.5521	<.01
77	Theft from the person to date	63.5854	<.01
78	Theft from vehicle to date	23.8188	<.01
79	Theft in a dwelling other than from an automatic machine or meter to date	104.7038	<.01
80	Theft or unauthorised taking of a pedal cycle to date	54.1266	<.01
81	Theft or unauthorised taking of motor vehicle to date	64.4267	<.01
82	Threat or possession with intent to commit criminal damage to date	226.5829	<.01
83	Threats to kill to date	89.5117	<.01
84	DV IPV events to date	631.8284	<.01
85	DV non IPV events to date	980.5355	<.01
86	Events by perp of each known vic to date	566.5733	<.01
87	Incidents/events to date Offender	2033.742	<.01
88	Index of Multiple Deprivation (IMD) Rank	11.3365	<.01
89	Offender gender_M	41.4007	<.01
90	Offender gender_Other	0.3441	=.79
91	Relationship classification_Other - known	2.6025	=.05
92	Relationship classification_Other - relative	0.8167	=.48

After fitting the cluster to the individual suspects, the resulting *k*-means model was then applied to all CPDA cases within the data set (n = 8,920). This data was then subset to capture all of the individuals who had more than one incident within the time window (number of cases = 5,052, number of offenders = 1,530). A Sankey chart was produced to illustrate the migration suspects within and between clusters as they 'reoffended'. The chart shows cluster

end points, stability and movement from the individuals' first event, through to their their 5<sup>th</sup> event during the time window.

### ***Psychological Contextualisation Procedure***

To sample cases for a deep dive, the most recent crimes for each unique suspect were isolated. Two members of the research team randomly selected crime reference numbers to access a sample of cases within Police Headquarters. A random sample of 34 cases were selected (17 cases each), with the researchers also conducting a deep dive on the 4 (attempted) parricide cases for further context.

Psychological contextualisation first concerned the researchers reading of the case dashboard in CONNECT to familiarise themselves with the full remit of information relating to the case. This was followed by an examination of the suspects photos (for signs of brain injury), general police markers, linked investigations, vulnerable adult history, and vulnerable child history. Each of these items contained a link within CONNECT that allowed the researchers to read the suspects history in detail. This process was then replicated for the victim, as well as the mother and/or father of the suspect if they were present and not the primary victim (i.e., if the case concerned son abusing grandfather, but the suspects father was present in case notes).

All of the above information was used to complete a pre-formed template of psychological context (formed through the systematic literature review) and to make additional notes about key issues/traumas present in the suspects history. Each case took approximately 2 hours to complete.

Once coding and notes had been taken across the 34 cases, the coding of the psychological contextualisation template was aggregated into a spreadsheet. In addition, the additional notes taken by the researchers were subject to a thematic analysis in order to determine recurring patterns across the 34 cases. The coding of the additional notes were also aggregated into a spreadsheet. Both outputs were released by Lancashire Constabulary following security and data protection checks.

## Results Chapter 1: Examining the Characteristics of CPDA

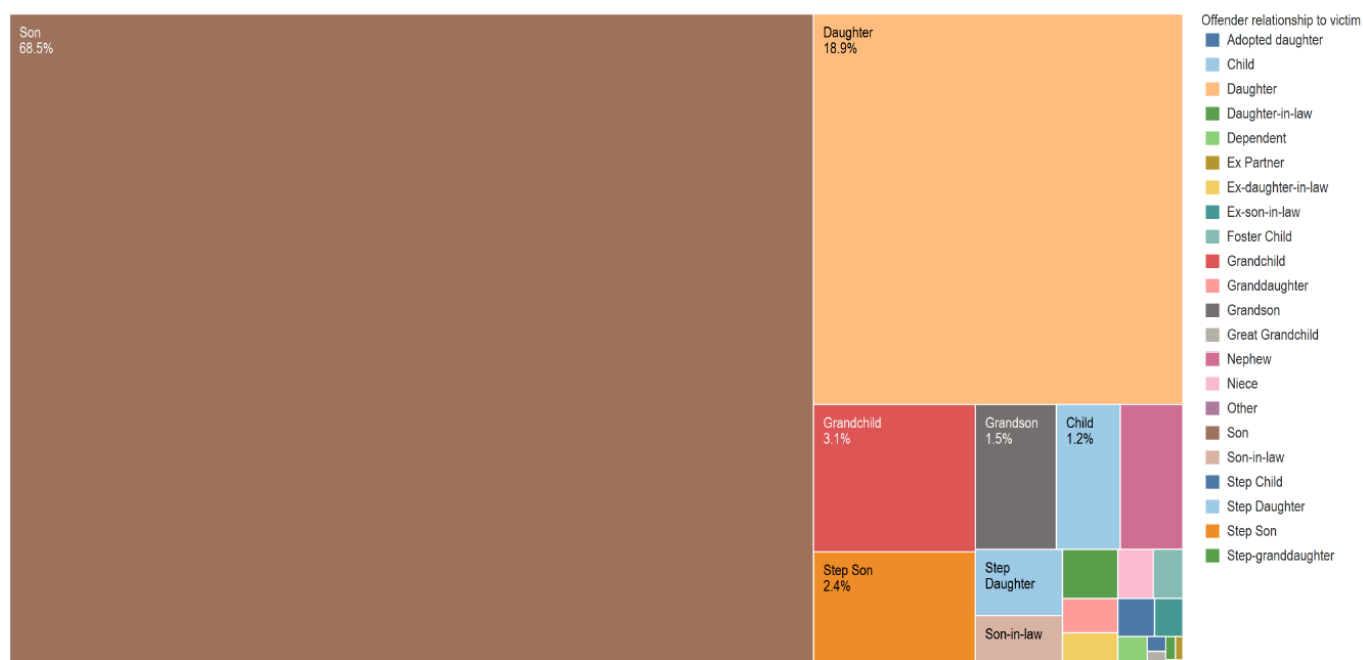
Lancashire Constabulary responded to 101,520 cases of domestic abuse between 28<sup>th</sup> November 2018 and 27<sup>th</sup> November 2021. The three years of domestic abuse data included all dynamics, including partner, family and CPDA of those aged 16 years and older. When applying the filter to identify cases of CPDA, a sample of 9,544 (9.4%) cases were identified. The proportion of CPDA cases was consistent with our previous report (Graham-Kevan *et al.*, 2021). The following chapter examines the characteristics pertaining to the offender, victim, crimes, and harm.

### Characteristics of Offender/Victim

#### Relationship

Comparable to previous offender sample literature (Simmons et al, 2017), the majority (87%) of the victim to offender relationship was parent. Sons accounted for most incidents (68.5%), followed by daughter (18.9%). The remaining relationships comprised of more distant relationships including grandchildren, stepchildren, nephews, and nieces.

Figure 3: Proportion of Offender Relationship to Victim



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## Gender

As denoted from the relationships between victim, the extracted data showed 77.7% of offenders were male, with female offenders accounting for 22.2%. Similar proportions were reversed for victims, where female represented 72.6% and males 27.4%. Across both gender categories, women were more likely to be victimised by both male and female offenders. Where the offender was male, 71% of victims were female and 29% male. Similarly, where the offender was female, 78% of victims were female and 22% were male.

## Age

As stated previously, examination of CPDA has largely categorised children by age, as opposed to relationship. This means that much previous work in the research field of CPDA concentrates on abuse conducted by children under the age of 18. However, the Domestic Abuse Act (2021) defines domestic abuse as taking place between person of age 16 or over. As such law enforcement data consists of offenders aged 16 and over.

Figure 4: Age Intersection Between Offender & Victim

Victim age when crime committed (grouped)	Offender age when crime committed (grouped)				
	19 and under	20-29	30-39	40-49	50+
30-39	842	112			
40-49	1,158	1,311	61		
50-59	754	2,050	1,978	690	158

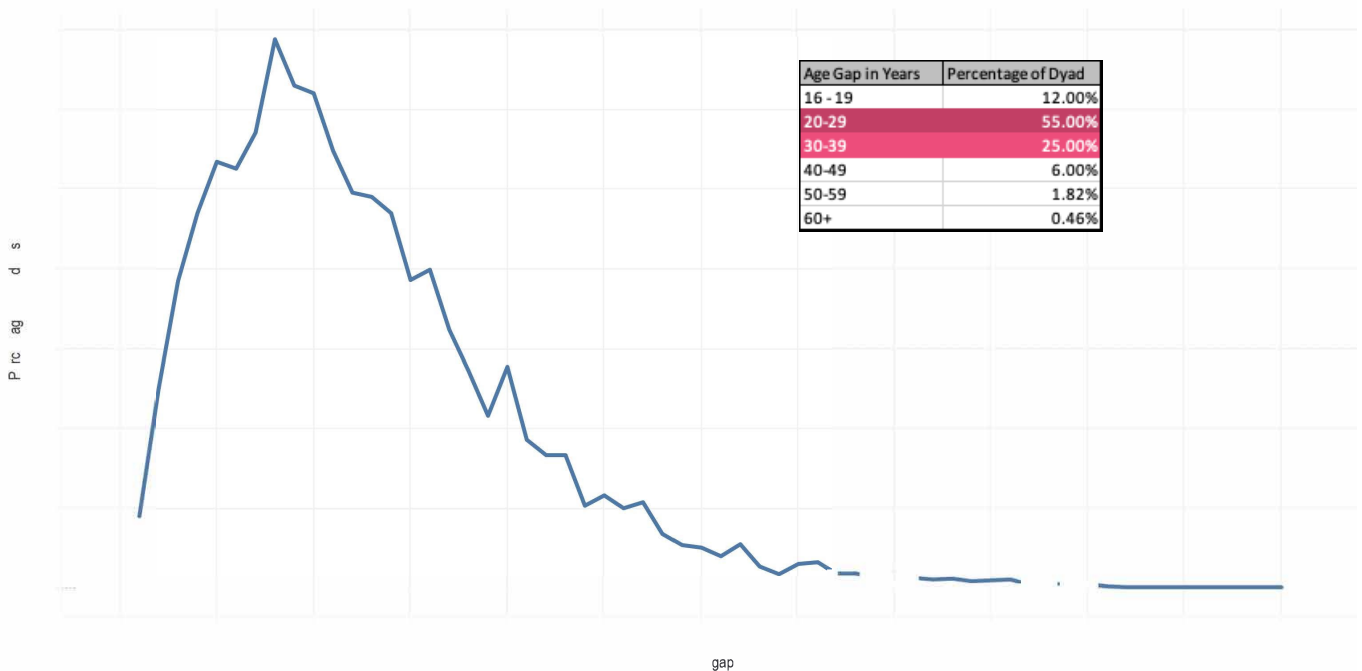
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Here the largest category of offenders is aged 20 – 29, followed closely by those aged 30-39. Victims most at risk of CPDA in the data extraction are aged 50 – 59.

### Age Gap

Examining the age gap between offender and victim in Figure 5, there was a sharp increase in the number of incidents starting at a gap of 17 years, through to the highest level at 23 years gap (6.88%). The findings demonstrated more than half (55%) of CPDA occurs within a dyad where the age gap between the victim and suspect was 20- 29 years. The incidents drop almost as sharply until at an age gap of 43 years the number of events drop to 0.69% of CPDA and continue to diminish.

Figure 5: Age gap curve between offender and victim



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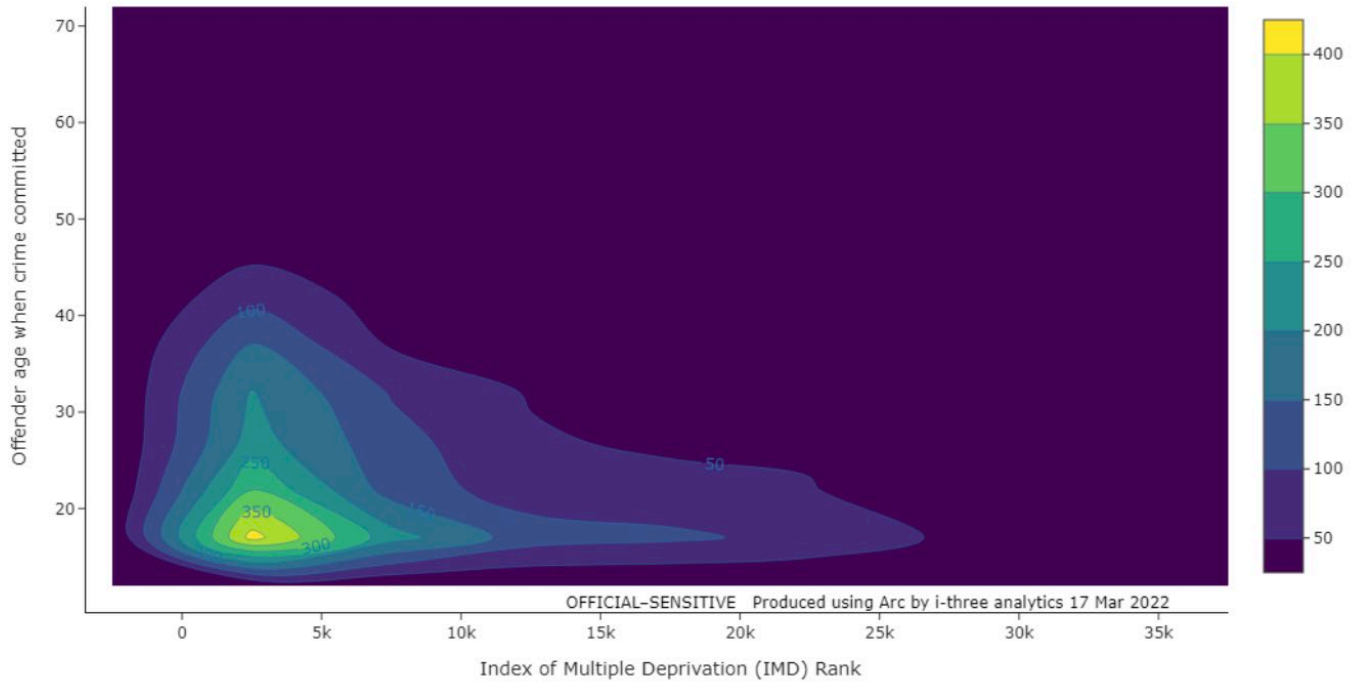
### Deprivation

Literature has shown that family abuse is a complex social problem with several influencing factors (Dutton, 1985; 2006), including social issues such as deprivation (Cottrell & Monk, 2004). The Index of Multiple Deprivation is the government’s official measure of derivation for neighbourhoods, ranking every small area in England from the most deprived (1) to the

least (32,844), allowing relative comparison. Factors considered include income, education, employment, health, crime, and housing.

Figure 6: Age of offender/victim and deprivation

Age of Offender vs deprivation levels over last 12 months Lancashire Constabulary based on Crime LSOA



Age of Victim vs deprivation levels over last 12 months Lancashire Constabulary based on Crime LSOA

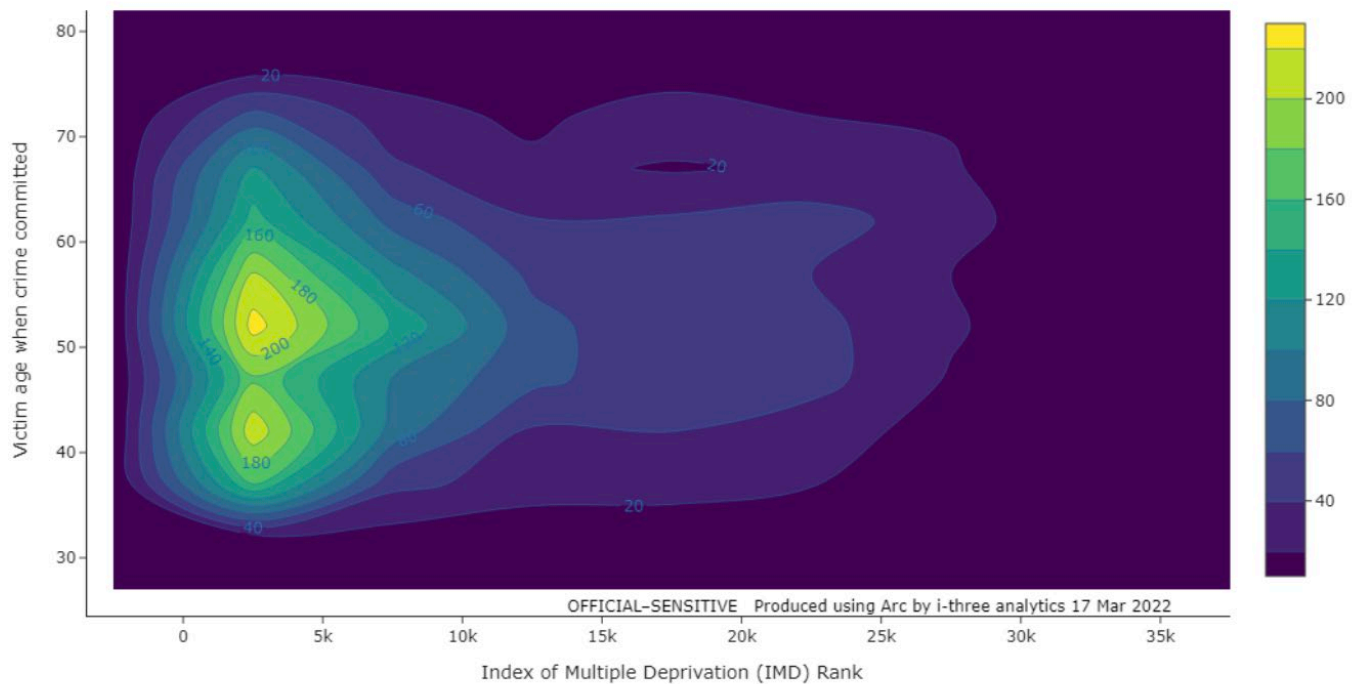


Figure 6 examined the interaction between offender age and deprivation associated with crime in Lancashire over the past 12 months, starting with low levels of incidents shown in dark blue and moving to bright yellow as number of incidents increase. The visualisation illustrated that the highest number of incidents was 419 (bright yellow), where the age of the offender was 17 and the deprivation rank is 2499.5 IMD. From this start point, the results suggested that as the age of the offender increases the number of incidents decreased. For example, at age 22 but at the same deprivation level the incidents reduce to 298, at age 27 the number had reduced further to 220 and by age 42 there were 82 incidents. Similarly, as the deprivation diminished (increased ranking) so did the number of incidents, with (at age 17) 419 incidents at 2499.5 IMD reducing by 90% to 42 incidents at 27,499 IMD.

The dynamics within the visualisation signify that both age and deprivation levels likely impact the number of offences. Equivalent analysis was applied to victims. This revealed two hotspots in the same deprivation rank as the offender analysis (2499.5 IMD), one where the victim is age 42 (214 incidents) and another where the victim is 52 (229). In the same manner as with the offender analysis, as IMD rank increased the number of incidents decreases.

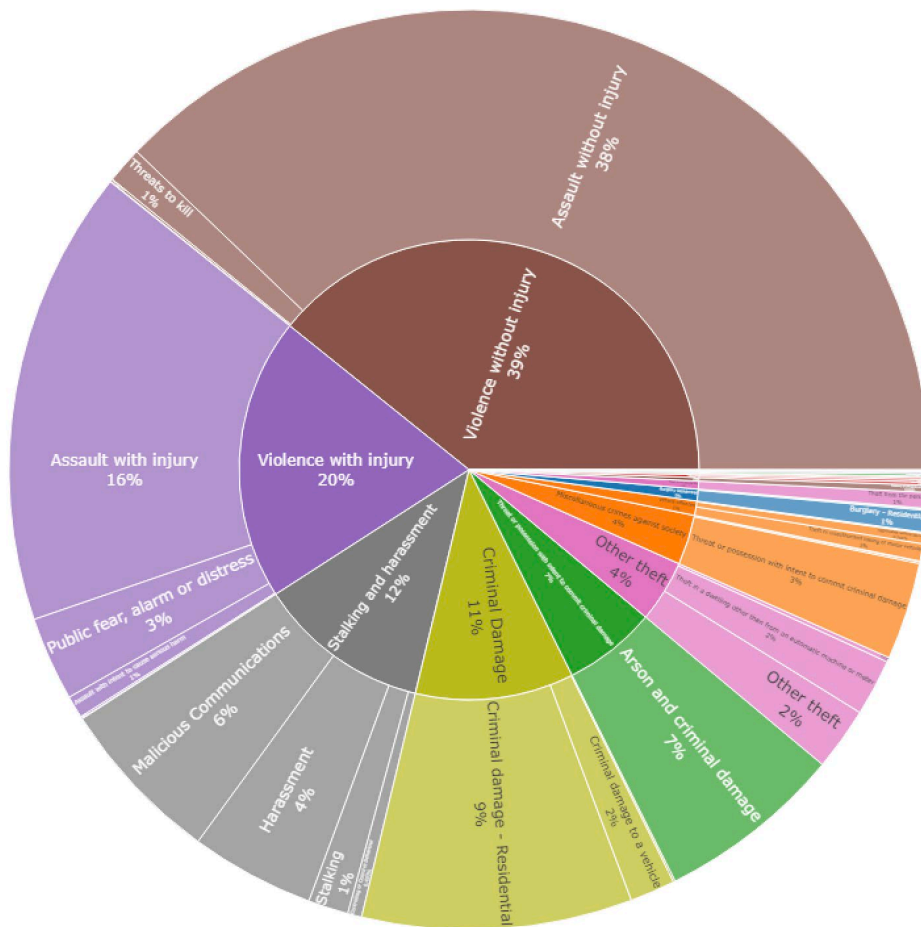
### ***Characteristics of CPDA Offences***

To better understand the composition of CPDA, the data was explored to identify the count of CPDA offence type and outcomes.

As a subset of domestic abuse, CPDA contains a comparable array of abusive actions. The data (presented in Figure 7) showed five offences accounted for 88% of the incidents; The largest categories were violence without injury (38%) followed by violence with injury (20%). Stalking and harassment, accounted for 12%, criminal damage for 11%, and threat or possession with intent to commit criminal damage accounting for 7%.



Figure 7: Sunburst plot of CPDA crimes over 24 month period

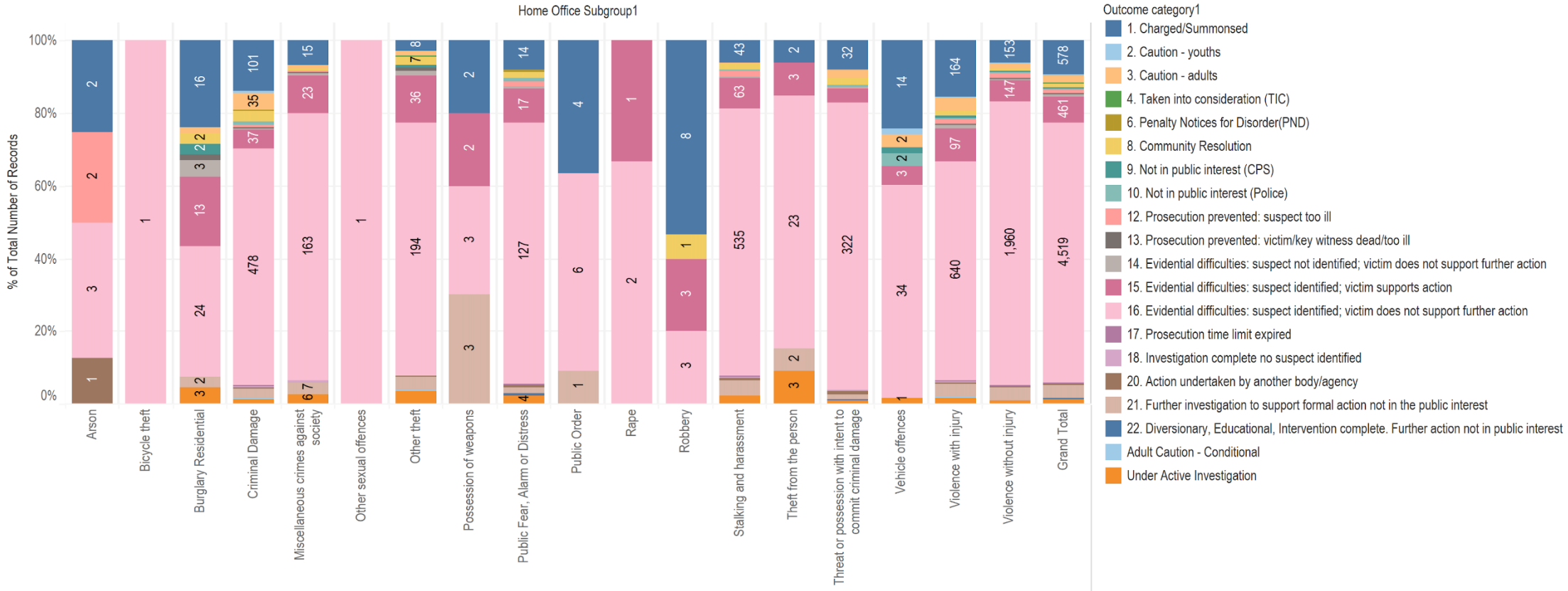


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### Outcomes of CPDA by Count

Generally, the largest outcome was, *evidential difficulties: suspect identified, victims does not support further action*, accounting for 71% of crime outcomes (Figure 8). Within the largest incident categories of CPDA offences, victim not supporting further action accounts for 78% of violence without injury, 60% of violence with injury and 74% of stalking and harassment, suggesting that there are barriers to reporting. These may include protection as parents may not want their children to get into legal trouble, parental shame or fear, and in some cases not wishing police involved in the family due to parental criminality. Furthermore, the parent may fear that they will be blamed for the abuse due to poor parenting (Holt, 2009). Offences most likely to be charged were robbery offences, followed by public order, arson and burglary.

Figure 8: Percentage of outcomes by CPDA offence



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## ***Characteristics of Harm***

### ***DASH vs Harm***

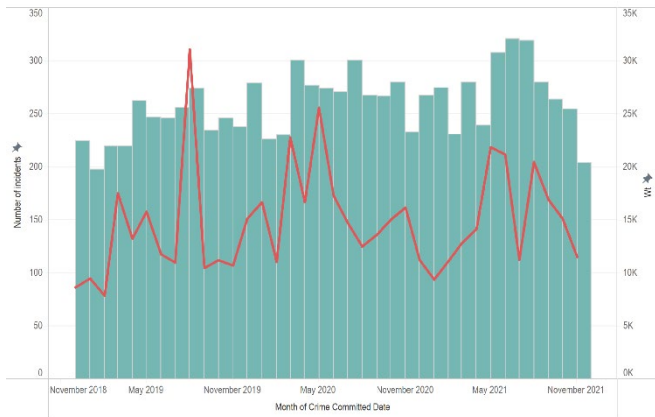
DASH (Domestic Abuse, Stalking and Honour Based Violence) is utilised across police services in England and Wales to identify and assess risk by proactively asking a series of questions largely regarding the suspects behaviour. The intention behind the assessment is to facilitate a structured approach to professional judgement about risk to the victim to prioritise agency response to those most at risk. However, the DASH has received some criticism regarding the validity of the questions (Almond et al., 2017) with claims that the tool is little better than random assessment (Turner et al., 2019).

Whereas DASH assesses risk, the Cambridge Crime Harm Index (Sherman et al. 2016) was created to reflect the impact of crimes using sentencing start points as a baseline penalty relative to the type of crime committed. Offence start points are converted into number of days and that becomes the CHI score. For example, homicide in England and Wales carries a sentencing start point of 15 years, converted into number of days gives homicide a score of 5,475. Applied to non-custodial sentences, (i.e., community sentences and fines) the scores are calculated using the number of hours of unpaid work required or the hours needed to pay the fine. This section will focus on the characteristics of harm as defined in the CHI.

### ***Combining Harm & Incidents***

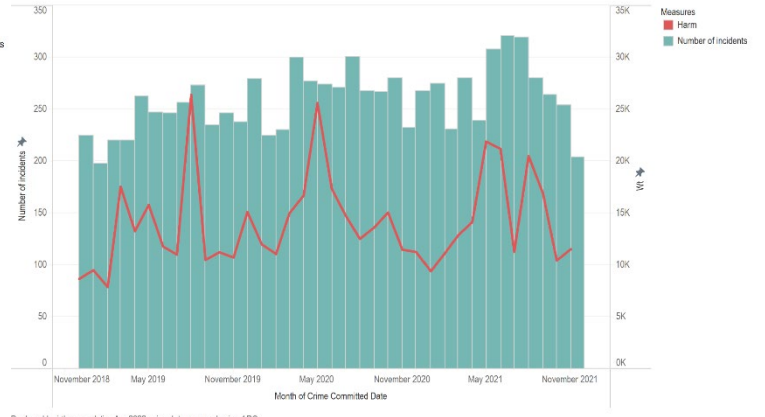
Although number of incidents is a critical measure for CPDA, consideration should be given to impact or harm. Combining these elements can provide valuable insights that may assist decision making. Figures 9.1 & 9.2 map incident numbers and harm levels by month. The first figure shows a spike in harm in July 2020 that is higher than incidents. Further investigation revealed that this was due to a homicide, which when removed gives a harm level comparable to number of events. However, broadly we can see that volume of crimes do not equate to harm, as some months have high incidents and relatively low harm.

Figure 9: Comparison of incidents vs harm (with and without homicide)



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Figure 9.1 incidents and CHI (with homicide)



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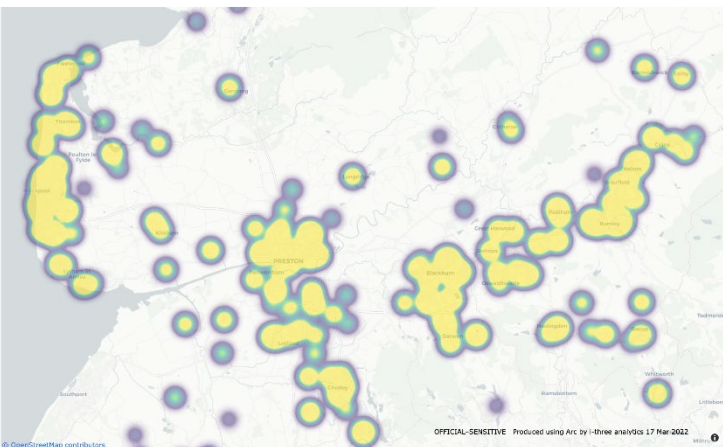
Figure 9.2: incidents and CHI (without homicide)

### Location Heat Maps – Incidents vs Harm

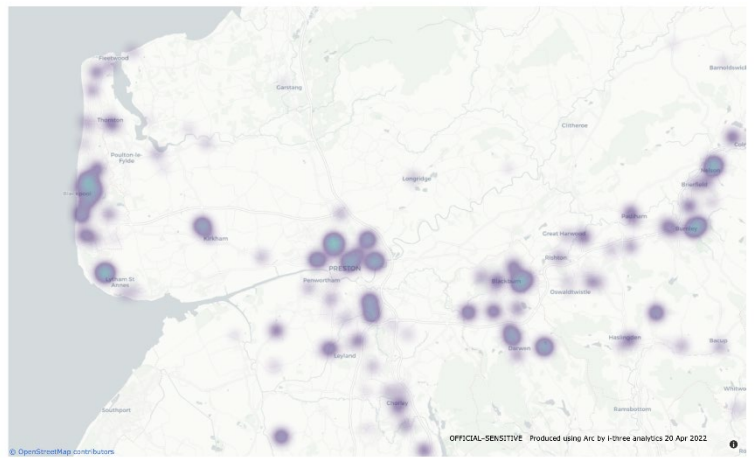
Similarly, harm can be used to gain locational focus. Mapping the number incidents shows large areas of hot spots. However, when harm is considered, specific areas are highlighted. In particular, Brookfield, Nooklands, Ashton-on-Ribble around Preston, Warbreck and Layton in Blackpool, Lytham St Annes, Wesham, Higher Audley and Wensley Fold around Blackburn, Huddlesden, Darwen, Nelson, and Burnley. These hotspots of harm could be considered high priority CPDA areas when combined with number of incidents, enabling planning regarding specific resources and support networks, or the need for more community wide support and resources.

Figure 10: Location maps of incidents (left) and harm (right)

All crimes in previous 12 months heatmap Lancashire Constabulary.



All crimes in previous 12 months heatmap Lancashire Constabulary.



### ***Harm by CPDA Crimes***

Applying CHI to the data showed that although violence without injury constituted the largest number of incidents (39%), this accounted for only 12% of harm. Contrary to this, and somewhat unsurprisingly, violence with injury made up 20% of the number of offences but represented 63% of harm. Additionally, categories that make up relatively few incidents can show increased relevance when examined using harm. Here, for example, burglary signified only 1% of offences but was the third largest category for harm.

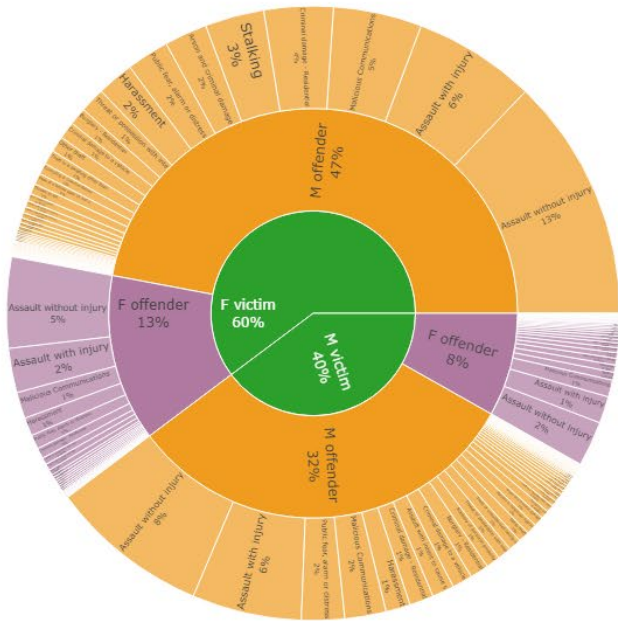
### ***Gender, Incidents and Harm***

Gender is evidently a consideration for CPDA. Figure 11 shows women compose 55% of victims and sustain 60% of incidents, suggesting that they may experience more than one type of CPDA or repeated incidents. The largest category of offence committed across both sexes is assault without injury. Interestingly, when applying a measure of harm, men appear to experience increased levels of impact when compared to their composition of victims and incidents. While men constitute 45% of victims and 40% of CPDA incidents, they experience 49% of harm. The increase appears to stem from assault with intent to cause serious harm.

Figure 11: Incidents and harm to victims of CPDA

Offences by gender for last 12 months in Lancashire Constabulary

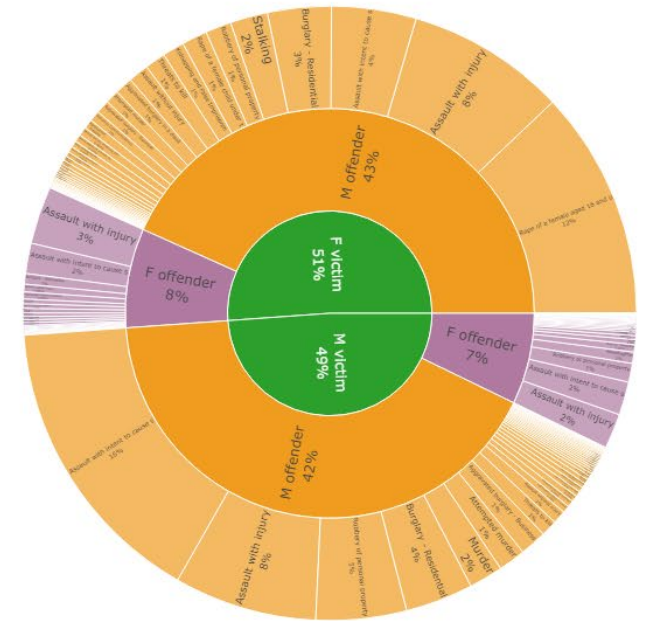
Number of incidents



Number of victims



Amount of harm



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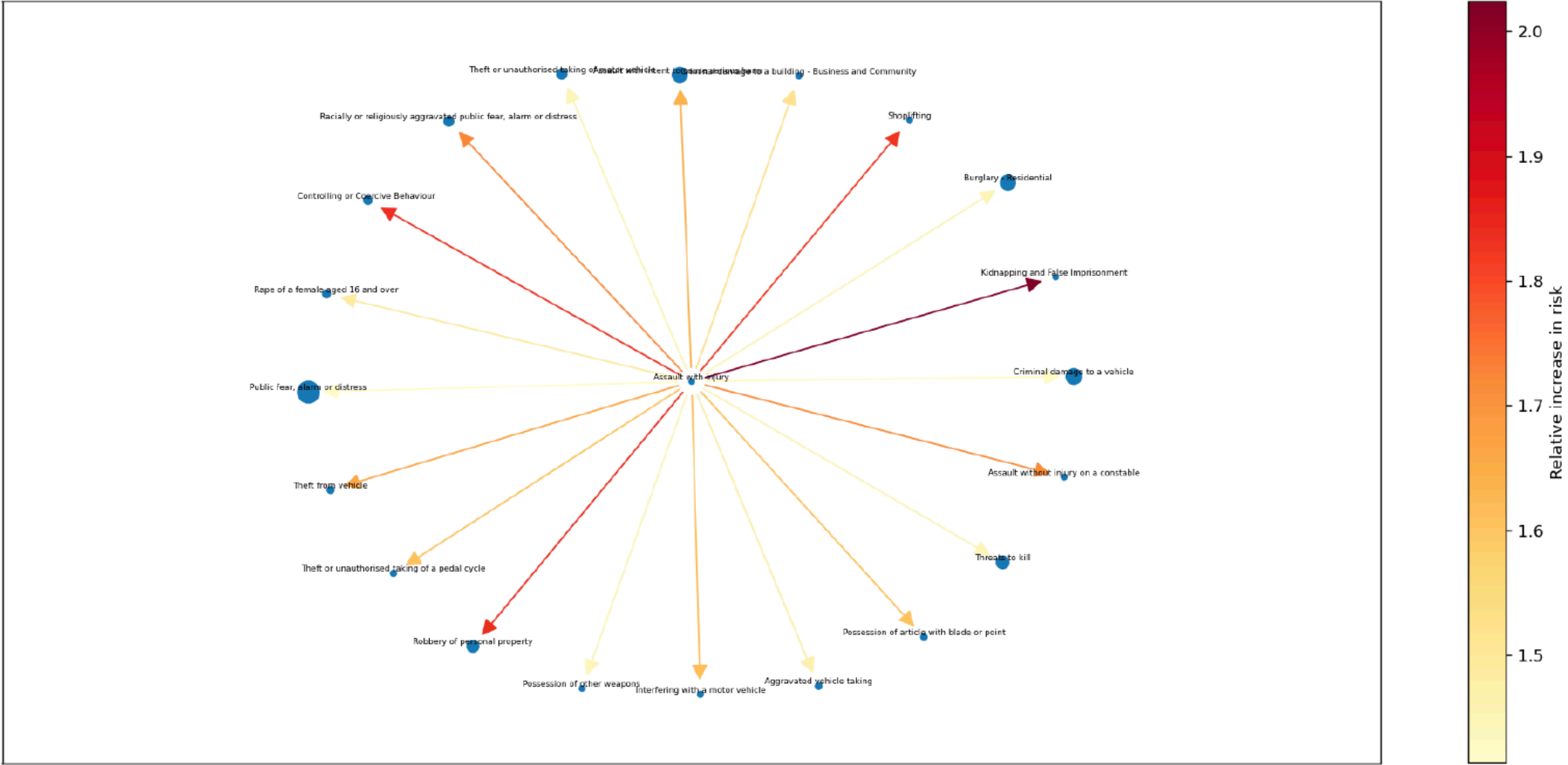
### ***'Market Basket' of Offending***

Market basket analysis (MBA) has become a widespread artificial intelligence tool in the retail sector, helping organisations better understand their customer base by predicting purchasing decisions (Ganti et al., 1999). Simply put, in this arena MBA examines what combination of products (factors) occur together. Enabling the retailer to predict the likelihood of an individual who purchases one product also purchasing a specific other based on previous purchases (behaviours) of both the individual and the group of others purchasing the same product.

This technique has lately begun to be used in the social sciences. In a recent study by Bako et al. (2020), MBA was used to identify the reasons for social work referrals in an urban safety-net population. From a sample of 33,683 adult patients who sought care at an outpatient healthcare centre in an economically challenged area of Indiana USA, 7,328 patients had encounters with the onsite social worker. From a list of thirteen categories, the study found the most common reasons for referral included financial, pregnancy, mental health, and family/social support. Additionally, the analysis identified co-occurring needs allowing provision to be calibrated and targeted and prompting specific screening questions once one type of need is identified. Having this level of knowledge may be used to maximise the efficiency of multiagency early intervention workstreams.

Applied to the current dataset, MBA revealed the relative increased risk of other offences being committed if a CPDA offender commits one or more assault with injury. Those with the highest increase are kidnapping and false imprisonment, coercive and controlling behaviour, robbery of personal property, shoplifting and racially or religiously aggravated assault without injury. However, caution should be exercised as although the kidnapping/false imprisonment has the highest increase in risk there were only 4 incidents over the past 24 months. While offences that have relatively lower increase in risk, such as public fear, alarm, or distress, occurred 132 times.

Figure 12: Key Crime that become more likely if CPDA offender commits assault with injury





Further investigation using MBA examined criminality in the opposite direction, key crimes as co-occurring outcomes that increase the chance of CPDA offenders also committing one or more assault with injury. Assault without injury, Robbery of personal property and Stalking was the offence co-occurring with the highest increase in risk for assault with injury. More notably, assault without injury appeared in 13 of the 20 groups, suggesting this may be an indicator of potential escalation to assault with injury or that assault with/out injury is a common pairing in CPDA. However, here again caution should be exercised as the additional offences (both CPDA and not CPDA) do not act as predictors and occur at any time before or after the assault with injury.

## Results Chapter 2: CPDA during the Pandemic

During 2020/21, the UK was subject to national lockdowns that aimed to prevent the spread of coronavirus (a timeline illustrating the progression of lockdowns and measures throughout 2020/21 can be found in Appendix B). The first major lockdown was announced on 23<sup>rd</sup> March 2020, with people ordered to “stay at home”. An easing of measures occurred in June through to September. However, on 5<sup>th</sup> November a second national lockdown was imposed for four weeks. On 2<sup>nd</sup> December 2020, there was a lifting of lockdown, but with restrictions in place during Christmas 2020. Many restrictions eased in May 2021, and ‘Plan B’ was enacted in September 2021 with the stated intention to protect the NHS from undue pressure throughout the winter months.

In conjunction with the coronavirus measures, domestic abuse charities highlighted a 46% increase in call demand (Gov.uk, 2020), with the National Domestic Abuse Helpline reporting a 65% increase between the months of April and June 2020. The increase in call demand was argued to represent a ‘shadow pandemic’ of DA victimisation by the United Nations (Mohan, 2020). Specific examination of police recorded crimes, however, resulted in a mixed picture. The Office of National Statistics highlighted a 7% increase in the number of police recorded offences that were flagged as domestic abuse-related. However, due to the gradual increase of such offences over previous years of data, it could not be concluded that the increase could be directly attributed to the coronavirus pandemic and lockdown restrictions (ONS, 2020a). It was further stated that the increase in demand could be related to an increase in severity of DA, due to the victim not being able to leave their home, as opposed to an increase in the number of victims (ONS, 2020b).

In order to identify whether there were distinct changes within the monthly counts of police cases, a Pruned Exact Linear Time (PELT) method was used to detect changepoints in the counts (Killick *et al.*, 2012). Consistent with the literature, the current analysis identified an increase in the volume of domestic abuse cases from March 2020, which marked the first national lockdown. However, when broken into cases reflecting CPDA and non-CPDA, the results highlighted further interesting findings. Whilst the changepoint in March 2020 was present for both subsets, the analysis found that there was a much more pronounced increase in the trend of CPDA cases in March 2020 than in all other forms of domestic abuse (see

Figures 13 and 14). The trends illustrate that CPDA rose sharply at the announcement of the first national lockdown in March 2020, with CPDA trends remaining consistent until a further increase in summer 2021.

Figure 13: Step changes in the monthly counts of CPDA

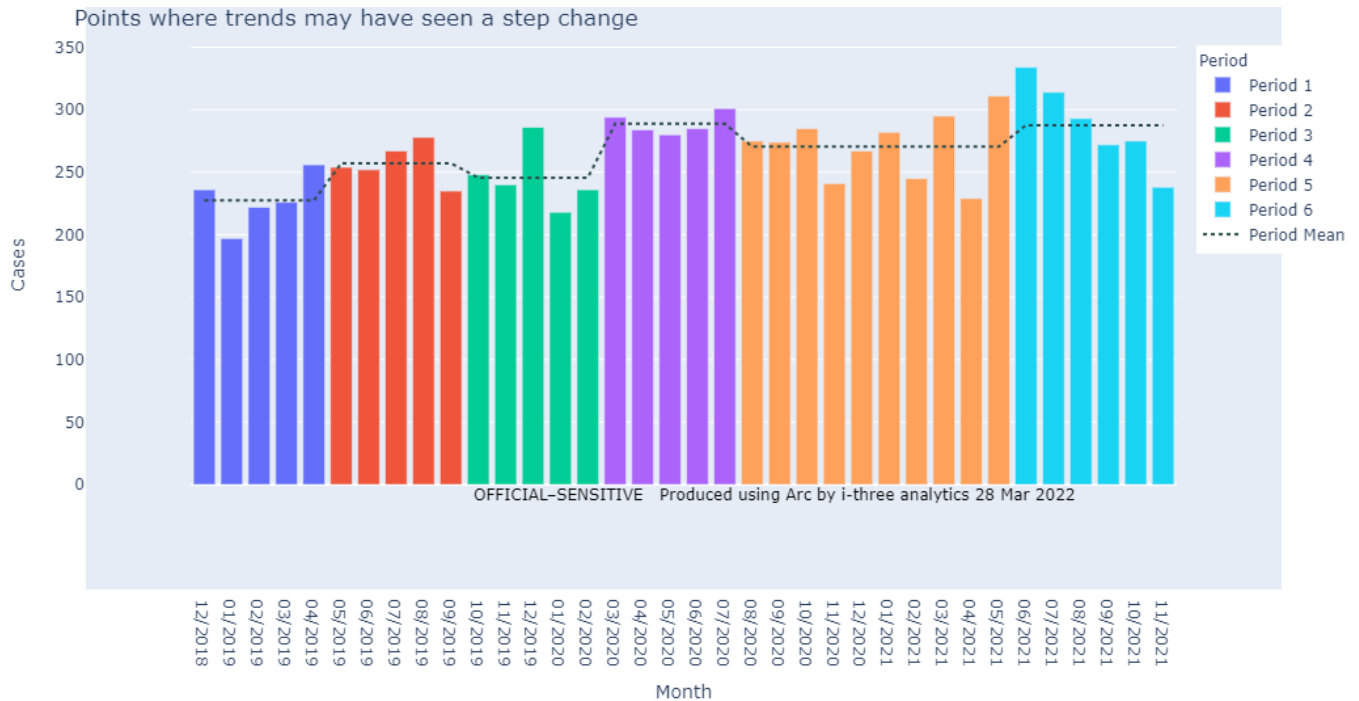
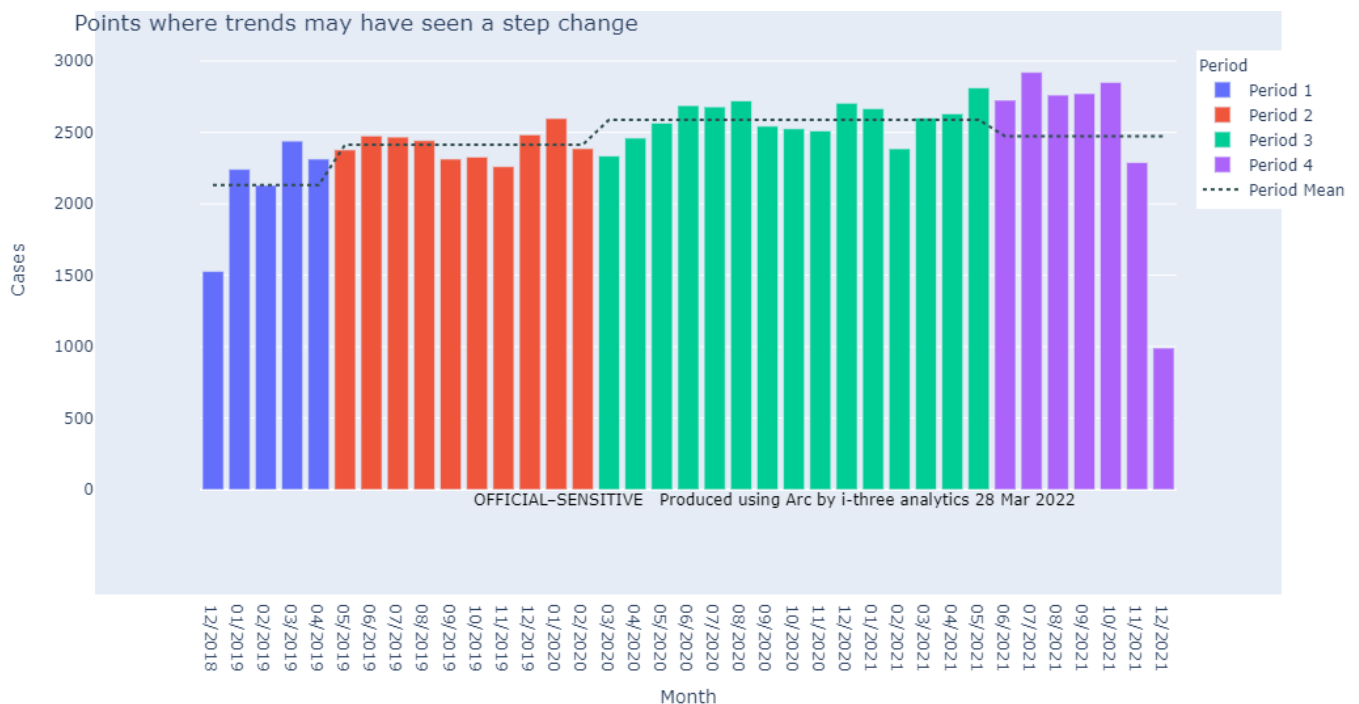


Figure 14: Step changes in the monthly counts of non-CPDA

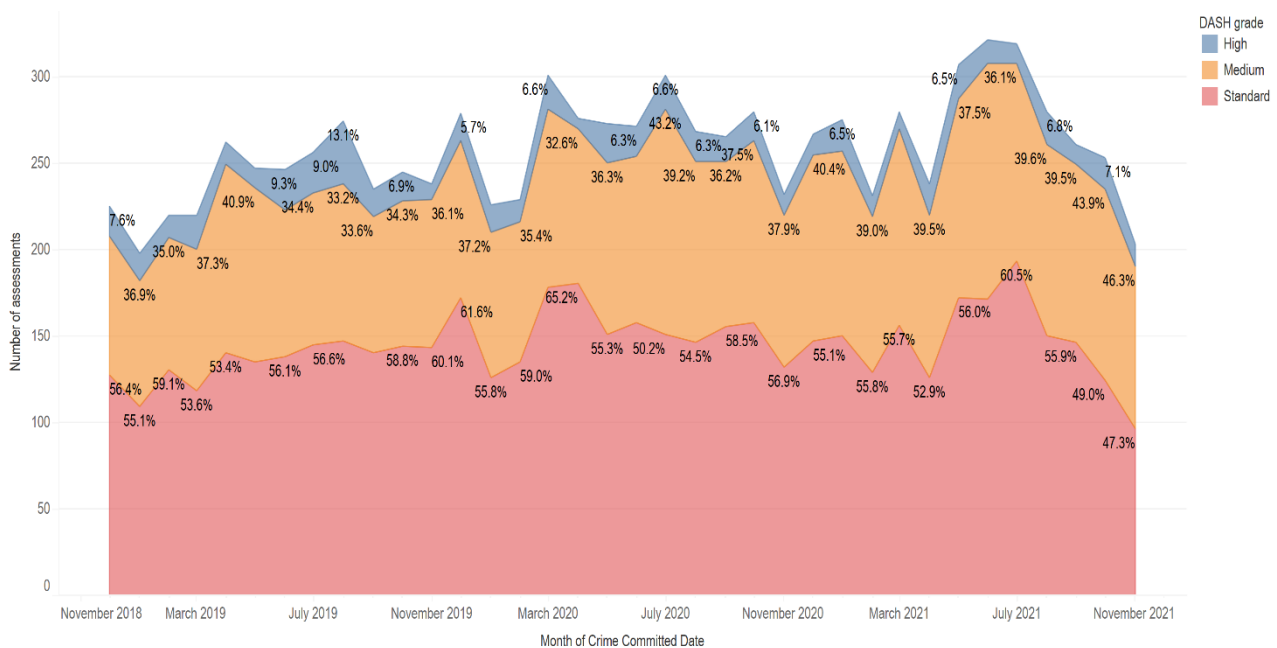


The trend likely reflected the movement of adult children back into a parent’s home as the nation isolated during the pandemic. The rise in the number of police recorded cases likely illustrated the resulting difficulties between adult children and parents as they underwent a prolonged period of confinement together within the same living space.

Furthermore, the CPDA trends also eased August 2020, perhaps linked to the re-opening of leisure activities and the introduction of the Eat Out to Help Out scheme which encouraged people to leave their homes following the easing of lockdown restrictions. However, there was a final marked increase around May/June 2021 (see Figure 13). It is unclear what the trend could be linked to, although the mixing of two households and hosting of weddings and funerals could have resulted in increased engagement between families. In turn, the increased engagement over major family events, especially ones involving alcohol, could have compounded the trend of CPDA incidents occurring within the summer months.

With regards to the seriousness of the CPDA cases throughout lockdown, the monthly proportions of DASH risk were examined to understand whether there was an increase in higher risk cases. However, plotting of the DASH illustrated that risk trends seemingly stayed consistent throughout lockdown, even though there were uplifts in the number of assessments in March 2020 and May/June 2021 (see Figure 15).

Figure 15: Monthly DASH risk grade proportions for CPDA cases.



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Overall, the pattern of CPDA illustrates a markedly different trend in comparison to all other forms of DA. Whilst both saw a step change during lockdown, CPDA decreased during the Autumn 2020 through to Spring 2021, whereby a there was a further increase in May/June 2021. This is contrasted against the consistent trend in other DA, which then decreased in May/June of 2021. Given the literature and media highlighting a stark increase in DA issues during lockdown, our analysis illustrates how much of this demand could have stemmed from CPDA rather than partner abuse during the initial stages of lockdown. Furthermore, it also appears that CPDA followed a different trajectory following on from May/June 2021, whereby CPDA saw an increase and all other DA saw a decrease.

## Results Chapter 3: Forming a Dynamic Typology of CPDA cases

The formation of typologies has been a long-practiced method in criminology, with the process usually aiming to segment a larger population of offenders into smaller and more meaningful groups. In intimate partner abuse (IPA) typologies have been developed to better understand the risk and treatment need of perpetrators. One of the most notable is Holtzworth-Munroe and Stuart's (1994) psychologically informed typology developed through a review of the literature, to allow a systematic examination of individual and situational factors that influenced how and why different men use violence against their female partners (see Table 5 below).

*Table 5: Frequency of Abusive Behaviour and Psychopathology*

<b>Dimension</b>	<b>Family only</b>	<b>Dysphoric/borderline</b>	<b>Generally Violent</b>
<i>Severity of violence</i>	Low	Moderate	Severe
<i>Coercive control</i>	Low	Moderate	Severe
<i>Generality violence</i>	Family-only	Low-moderate	High
<i>Nonviolent crime</i>	Low	Low-moderate	High
<i>Psychopathology</i>			
Personality disorder	None/passive /dependent	Borderline/ Schizoidal	Antisocial/ Psychopathy
Substance use	Low-moderate	Moderate	High
Depression	Low-moderate	High	Low
Anger	Moderate	High	Moderate

The family only group are generally low aggression within the family and no aggression outside of the family. They evidence low criminality and low psychopathology. The dysphoric group in contrast are the most psychologically distressed and emotionally volatile of the three, with their abusive behaviour largely stemming from negative emotions. Although they largely confine their abusive behaviour to within the family, they may occasionally be aggressive to non-family members. Their aggression is associated with high negative emotions including evidence of borderline (now termed emotionally unstable) personality disorder. They may also show schizoidal personality characteristics and may have problems

with alcohol and drug abuse. The generally violent are the most physically aggressive and coercively controlling. Their abusive behaviour appears driven by antisocial personality /psychopathic traits. They have the most extensive history of related criminal behaviour and legal involvement.

In terms of psychopathology, each subtype has different types and severities of adverse childhood experiences. Those included in the original typology are detailed below in Table 6.

*Table 6: Adverse Childhood Experiences and Family Dysfunction*

<b>Dimension</b>	<b>Family only</b>	<b>Dysphoric/borderline</b>	<b>Generally Violent</b>
<i>Exposure to parental IPV</i>	Low-moderate	Moderate	High
<i>Child abuse/rejection</i>	Low-moderate (Poor parenting)	Moderate-high Parental rejection and child neglect &/or abuse	Moderate-high High levels of both witnessing parental violence & being abused physically & sexually as a child
<i>Impulsivity</i>	Low-moderate	Moderate	High
<i>Association deviant peers</i>	Low-moderate	Moderate	High

Although Holtzworth-Munroe and Stuart's (1994) typology is dated, it has received support from the empirical literature (Cameranesi, 2016; Lohr et al., 2005), although further work suggested a fourth cluster (Holtzworth-Munroe et al., 2000) which appeared to be a low level generally violent cluster, and that there is evidence that the types may move between clusters over time (Holtzworth-Munroe et al., 2003).

It is likely that this typology describes more than intimate partner abuse, indeed our previous analysis of CPDA found evidence for similar clusters within the police data. Previous analysis, however, did not include in-depth analysis of case information. Therefore, the aim of this chapter and the subsequent one is to explore the existence of meaningful subtypes of CPDA perpetrator through whole sample quantitative analysis (the current chapter) and

qualitatively explore a random proportion of cases in terms of the case file information including incident information, suspect criminality, suspect vulnerability, substance use and psychopathology. In order to capture adverse childhood experiences, we explored the suspects', and where possible both parents' and any step-parents', history of IPV, substance use, psychopathology and criminality. Where Holtzworth-Munroe and Stuart (1994) were clear on perpetrator behaviour, they neglected victim behaviour. Johnson (1995; 1999) sought to address this when he developed his typology of IPV and coercive control. Johnson argued that there were important differences in the dynamics of violent intimate relationships. He argued that coercive control was more impactful on victim wellbeing than physical violence. He predicted that non coercive victims subject to coercively controlling violence were more representative of 'domestic abuse' than relationships with low control where abusive behaviour appeared driven by situational factors. Johnson argued that coercive control was almost entirely used by men and that it was driven by the perpetrator's patriarchal beliefs. Subsequent research found that men and women are equally likely to be highly coercive and violent, and that victims of coercive abusers were more afraid and more likely to be injured than not controlled counterparts (Graham-Kevan & Archer, 2003a; 2003b; 2005; 2008) and more likely to seek help (Bates & Graham-Kevan, 2016). Johnson's typology illustrates the importance of exploring the family dynamics within incidents of domestic abuse.

As the literature on typologies of child to parent aggression is in its infancy, the team took a two-pronged approach to exploring the existence of types through quantitative and qualitative data. Notwithstanding the limitations in forming typologies, in applying the approach to CPDA the project aimed to provide the best possible segmentation of data based on police case files. It is argued that there are five important characteristics when forming a 'good' typology (JRank, 2022). A good typology should be exhaustive; mutually exclusive; a reliable means of assigning people to types; developed through a systematic process; and, able to economise thought. Furthermore, given the increased popularity of data science, the range of possible applications and algorithms that could be applied to the subject area is vast.



Given the complexity and lack of research within the topic area, the current project focused on conducting an exploratory *k*-means cluster analysis and take the first step in forming 'types' of CPDA offenders across police data.

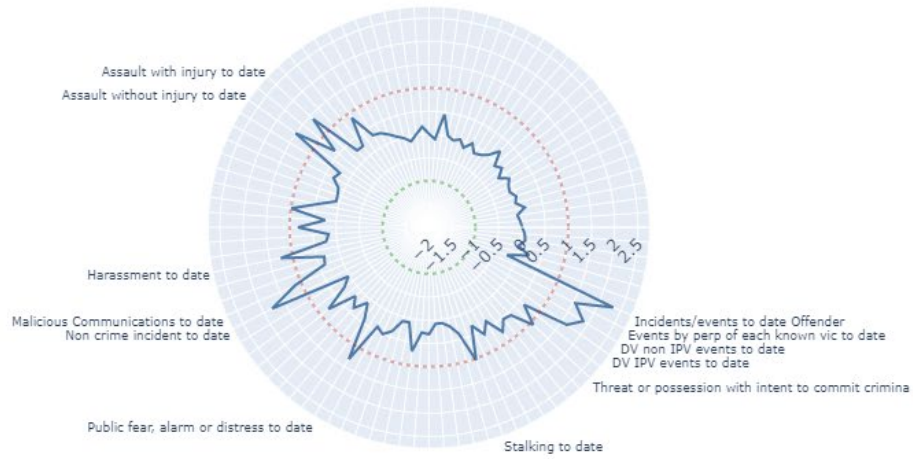
### ***Overall Cluster Fitting***

A four cluster model was developed across 92 features of the police data. Overall, the clusters mainly leveraged recorded crimes and the DASH risk assessment questions in their formation. The features of the four clusters were normalised (z scores) and illustrated in Figure 16 (with Figure 17 illustrating the defining features of each cluster).

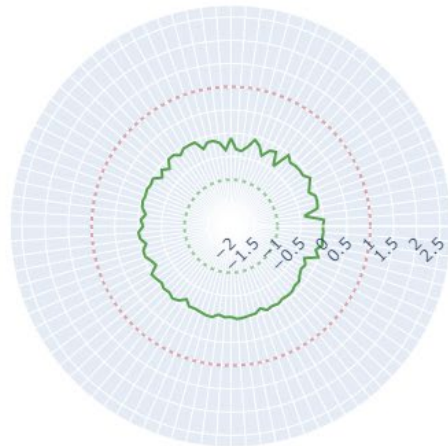


Figure 17: Normalised plot of defining features

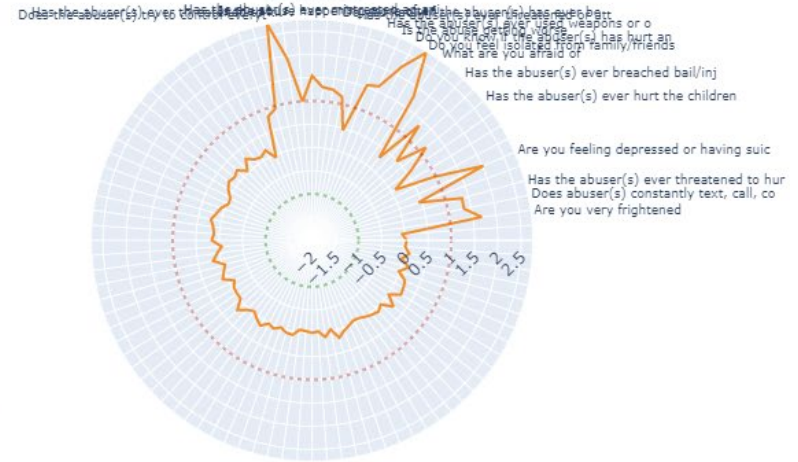
Most defining characteristics of each cluster  
Cluster 1



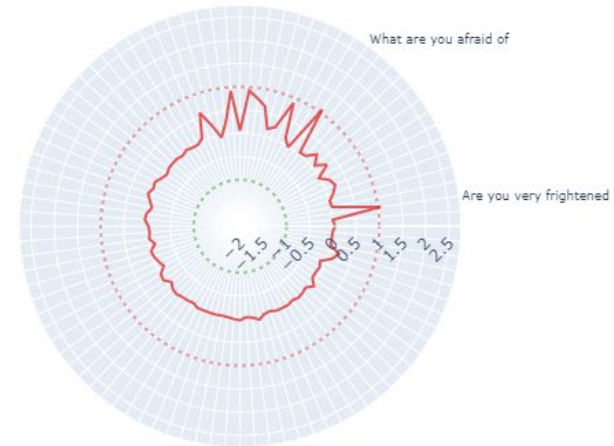
Cluster 3



Cluster 2



Cluster 4



The analysis illustrated how clusters 2 (yellow) and 4 (red) largely concerned DASH risk questions, with cluster 1 (blue) focusing on crimes. Cluster 3 (green) appeared to have no discerning features. To provide a more detailed understanding of the cluster features, Figure 17 illustrated the clusters individually with variable names only appearing when the feature had z score greater than 1. Distinguishing features were then used to explain the remit of the cluster, and how it may be distinct from the other clusters in the results.

***Cluster 1 – Mixed-Subjects Type (n = 474, 8.78%)***

The first cluster mainly concerns offenders who had seemingly conducted both IPV and CPDA (often extensively), as well as being generally abusive to a broader range of family relationships or wider to non-family members. The cluster was largely built around the suspect's recorded crimes, including: assault with injury; assault without injury; harassment; malicious communications; non-crime incident; public fear, alarm or distress; stalking; threat or possession with intent to commit criminal damage; DV IPV events; DV non-IPV events; Events by perp of each known vic to date; Incidents/events to date Offender. The presence of crimes such as stalking and malicious communications suggested that in addition to IPV events with partners, the suspects within the cluster also engaged in criminal behaviour with ex-partners, illustrating a consistent trend of domestic abuse crime in addition to that of CPDA.

***Cluster 2 – Coercive and Controlling Type (n = 205, 3.80%)***

The second cluster involved cases where the victim engaged with the DASH risk assessment and answered 'yes' to questions which, on the whole, indicated a suspect who was coercive and controlling. This cluster is particularly interesting within the realms of CPDA, given that coercive and controlling behaviour is often considered exclusively in partner abuse relationships. In this cluster, the DASH questions related to: are you very frightened?; does abuser(s) constantly text, call, contact, stalk or harass you?; has the abuser(s) ever threatened to hurt or kill the children/dependents?; are you feeling depressed or having suicidal thoughts?; has the abuser(s) ever hurt the children/dependents?; has the abuser(s) ever breached bail/an injunction and/or any agreement for when they can see you and/or the

children?; what are you afraid of?; do you feel isolated from family/friends?; do you know if the abuser(s) has hurt anyone else?; is the abuse getting worse?; Has the abuser(s) ever used weapons or objects to hurt you?; has the abuser(s) ever threatened or attempted suicide?; do you know if the abuser(s) has ever been in trouble with the police or has a criminal history?; is the abuse happening more often?; has the abuser(s) ever mistreated an animal or the family pet?; has the abuser(s) ever threatened to kill you or someone else and you believed them?; does the abuser(s) try to control everything you do and/or are they excessively jealous?

***Cluster 3 – No Discernible Features (holding cluster) (n = 3,620, 67.06%)***

This cluster did not illustrate any discernible features and could be considered to represent a broad range of behaviour with no distinguishing characteristics. In furthering the explanation, the cluster could be a result of the left-truncated data from the police since the current analysis could not include the history of each offender before 2018. It could also be that the DASH questions were failing to identify issues within the cluster, considering the tool was not conceived for such cases of domestic abuse (focused primarily on female victims of partner abuse). Given that the cluster contained the highest proportion of males who often respond with heightened depression as opposed to fear, it may well be that the cluster captured 'silent' forms/themes of abuse not yet identified by the current risk assessment tool or police data. With this in mind, the resulting cluster could be interpreted as a 'holding cluster', whereby further offending within the sample dates, a victim fully engaged with the DASH risk assessment, or a redesigned tool could allow for the capturing of more applicable data to assign the suspect to a different cluster type. It is envisaged, therefore, that if full histories of each offender were used and/or a better understanding of victimisation was achieved, the volume of this cluster would decrease as suspects were assigned to other cluster that better fit their behaviours and dynamics. Put simply, the police have the opportunity to prevent trauma and save money by 'unlocking' further insight that may be otherwise lost in current data structures.

#### ***Cluster 4 – Fear of Escalation Type (n = 1099, 20.36%)***

This cluster included DASH risk assessment questions indicating a frightened victim with further information often provided as to why the victim was frightened. Of note, however, was how the questions relating to the “abuse happening more often” and the suspect having “problems in the past year with drugs (prescription or other), alcohol or mental health leading to problems in leading a normal life” had z scores of > 0.9. This meant that these features were approaching the cut-off used in understanding the cluster features across the results and provided helpful insight into understanding cluster 4. Overall, these features indicated cases where the victim was frightened of the suspect due to behaviour within the reported incident, but they were also concerned that the abuse was occurring more often due to the suspects issues with mental health, drugs or alcohol, which seemingly impacted upon them leading a normal life. This cluster, therefore, seemed primarily concerned with suspect escalation, but in a different form to the coercive and controlling suspects in cluster 2 or mixed subject abuse suspects in cluster 1. As such, it was simply termed ‘Fear of Escalation’ type.

#### ***Cluster Composition***

To further understand the composition of suspects within each type, the suspect, victim and case characteristics of each type were explored further. Firstly, the suspect demographics were explored across each type to examine whether there was a difference in characteristics across the types. As seen in Table 7, there were very similar suspect demographics across all four types, although type 3 (no discernible features) appeared to differ slightly in the composition of gender with a pull towards female suspects in comparison to the other types.

Table 7: Suspect characteristics across each type of the typology<sup>3</sup>

Type	Suspect Gender		Suspect Age Mean (SD)	Suspect Ethnicity	
	% Male	% Female		% White N European	% Other Ethnicity
Type 1: mixed-subjects	85.2	14.8	27.3 (8.1)	88.6	8.0
Type 2: coercive and controlling	82.0	18.0	27.6 (9.5)	89.3	5.9
Type 3: no discernible features	70.3	29.6	27.0 (10.2)	81.2	9.3
Type 4: fear of escalation	84.0	15.9	27.6 (9.8)	86.1	8.6

When examining victim demographics across the typology (Table 8), the composition appeared more mixed than the suspect demographics. Whilst type 1 (mixed-subjects) and type 4 (fear of escalation) appeared to have a similar composition of victim characteristics, type 2 (coercive and controlling) appeared to pull towards female victims and type 3 (no discernible features) appeared to pull towards male victims.

Table 8: Victim characteristics across each type of the typology

Type	Victim Gender		Suspect Ethnicity	
	Male (%)	Female (%)	White N European (%)	Other Ethnicity (%)
Type 1: mixed-subjects	28.1	71.1	88.2	6.7
Type 2: coercive and controlling	17.1	82.9	89.3	4.9
Type 3: no discernible features	30.5	67.7	81.1	8.6
Type 4: fear of escalation	24.6	73.9	84.4	7.7

The police processing of each type was also examined for context, with crimes, reporting, division, and DASH risk grade all used for further context. Firstly, when placing the typology

<sup>3</sup> NB: Tables regarding suspect, victim and crime characteristic only draw out higher level categories and do not reflect all possible levels of coding. Therefore, row totals will often not sum to 100%.

and police force divisions into a table, the result illustrated how the composition of crimes appeared consistent across each area of Lancashire. One notable trend, however, was how the West BCU had higher proportion of type 2 (coercive and controlling) cases in comparison to other divisions. From the earlier geographical descriptive analysis, it is likely that this trend could be related to the heavily deprived area of Blackpool situated in the West BCU.

*Table 9: Breakdown of the typology across police divisions*

Type	West Division (%)	South Division (%)	East Division (%)
Type 1: mixed-subjects	32.9	30.4	35.9
Type 2: coercive and controlling	48.3	24.9	26.8
Type 3: no discernible features	33.5	27.0	38.1
Type 4: fear of escalation	35.9	29.0	33.4

The reporting and risk assessment illustrated in Table 10 highlighted how type 2 (coercive and controlling) and type 4 (fear of escalation) cases were more commonly reported through 999. Unsurprisingly (given that the clusters were formed around the DASH risk questions), type 2 and 4 also related to medium and higher risk cases, when compared to those in type 1 and 3.

*Table 10: Reporting and DASH risk grade across each type of the typology*

Type	Reported via			DASH risk grade		
	999 (%)	Phone (non- 999) (%)	Other (%)	Standard (%)	Medium (%)	High (%)
Type 1: mixed-subjects	66.9	15.2	17.8	55.1	40.1	4.6
Type 2: coercive and controlling	69.3	14.6	16.3	12.7	52.7	34.6
Type 3: no discernible features	62.7	16.0	21.2	71.0	26.4	2.4
Type 4: fear of escalation	71.0	15.7	13.5	27.2	60.6	12.1

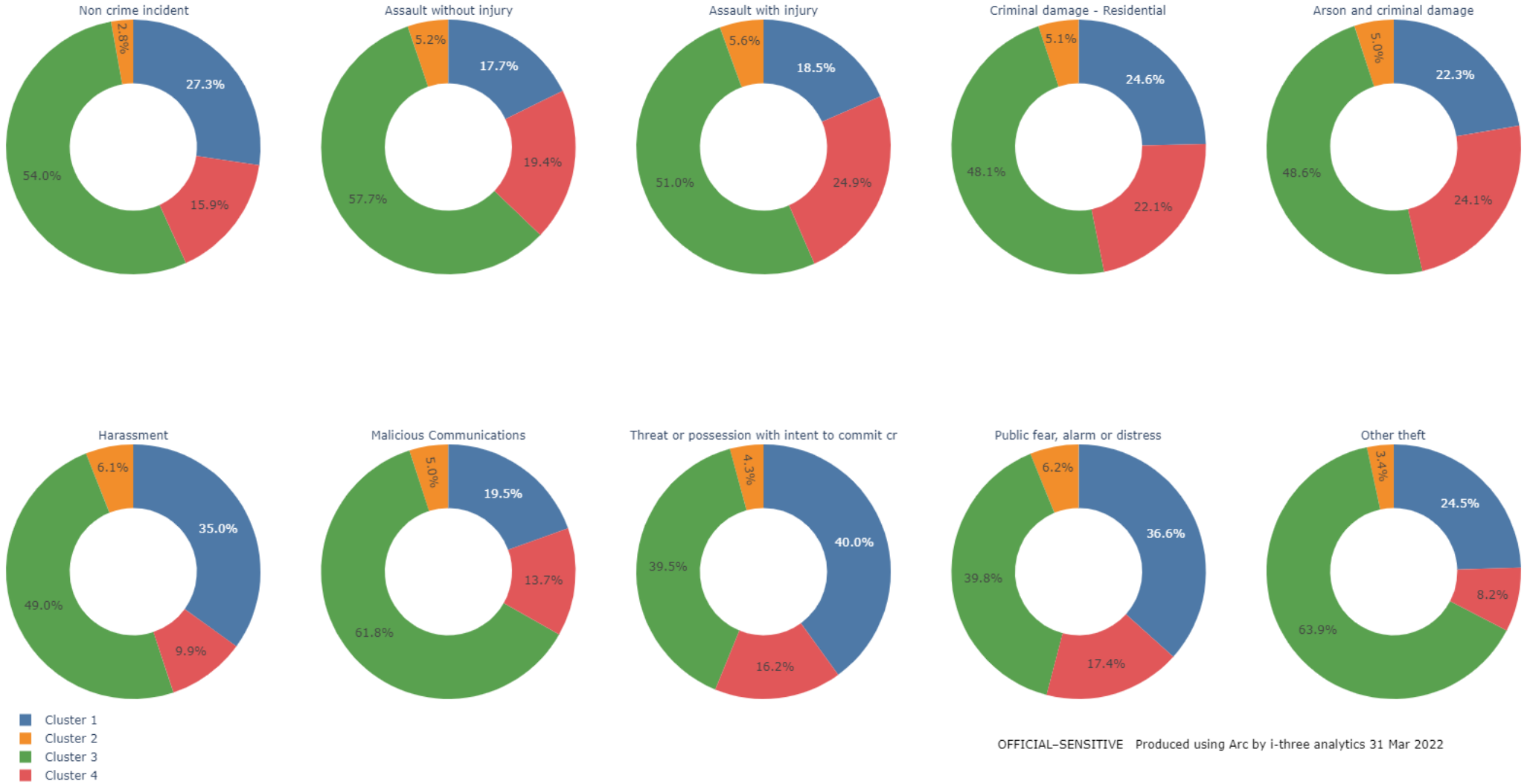


Finally, in addition to the location, reporting and overall risk grade, a breakdown of crimes across the typology (Figure 18) illustrated a mix of criminal behaviour. The visualisation illustrated how type 2 (coercive and controlling) and type 4 (fear of escalation) mainly related to crimes that were violent and would cause the victim harassment and/or fear, however such crimes were also present across the other CPDA types.

Type 1 had higher proportions of crime relating to public fear, threat, or possession with intent to commit criminal damage, and harassment. This builds towards an understanding that the type generally involved people well known to the police and who were generally engaged in widespread criminal behaviour. However, it could also be interpreted that the public fear, criminal damage, and harassment could be related to the abuse of ex-partners. This is because such crimes would often occur in more public environments (i.e., outside of the victims' home/workplace) or when the victim is travelling or picking up children etc. A similar explanation could be related to type 2, but with the added concern that they also had larger proportions of crimes relating to assault with and without injury. This possibly alludes to their more violent and coercive behaviours previously captured by the police. Type 3 seemed to have greater proportions of malicious communications and other theft in comparison to other types. This would be consistent with the explanation that the theme captures cases which may have not fit the more specific dynamics present within the other types. Finally, type 4 accounted for a disproportionately large amount of assault with injury, arson, and criminal damage. The crimes could relate to the victims reports that the abuse was happening more often and could be a reason why the victim was scared, since the suspect has caused visible damage to the victim's home, or injury to the victim themselves.

Figure 18: Proportion of crimes across each type

Proportion of all Crimes by Cluster (top crimes only - last 12 months)



OFFICIAL-SENSITIVE Produced using Arc by i-three analytics 31 Mar 2022

## **Cluster Transition**

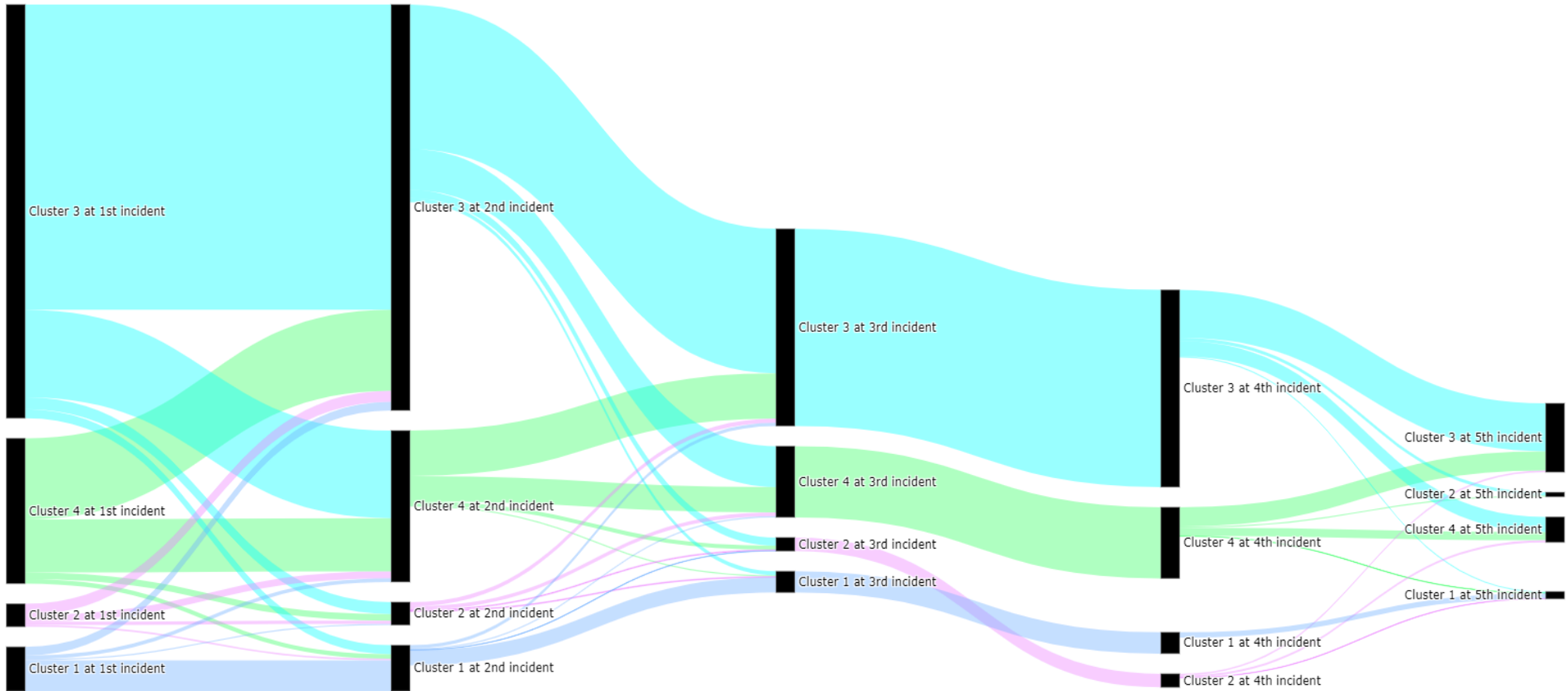
Once the cluster analysis had been fitted, suspects who had two or more incidents were subset from the main data ( $n = 1,530$ ). The cluster membership of the suspects was plotted at each incident (up to five incidents) to examine the transition across types as suspects 'reoffended' (Figure 19). Please note that suspects who had only one incident within the sample were not included within the visualisation.

From Figure 19 it was evident that type 3 (no discernible features) had the largest proportion of cases ( $n = 1,011$ ), of which the majority remained as type 3 when reassigned at their second incidents ( $n = 746, 73.8\%$ ). However, there were also sizeable cohort that moved from type 3 into type 4 ( $n = 214, 21.2\%$ ), and smaller cohorts that moved into types 2 ( $n = 29, 2.9\%$ ) and 1 ( $n = 22, 2.2\%$ ) respectively. Given that type 3 related to the 'no discernible features', the movement from this type to other types could be indicative of escalation in suspect offending. In cases where a victim may have been motivated to engage with the DASH risk assessment and provide information that indicated that they were now fearful of escalation, or in cases where the victim demonstrated a willingness to disclose a history of abuse, this information would have been the reason from suspects moving from type 3 into types 2 or 4.

Likewise, movement from types considered more harmful into type 3 may represent the impact of police involvement, since a police response may have motivated the suspect to moderate their behaviour. Alternatively, this movement could also be explained by the victim being concerned about the repercussions of completing the DASH risk assessment honestly. For example, in cases beginning in type 4 (fear of escalation) ( $n = 355$ ) and type 2 (coercive and controlling) ( $n = 56$ ), the victim may not have engaged with the DASH risk assessment out of fear of reprisals from the suspect. This may be a factor where police were unable to protect the parent/carer sufficiently and/or they were unable provide the reassurance needed for them to again speak openly. Another possible explanation is that parents/carers do not want the police to escalate the case and hence criminalise the suspect. In such cases, the DASH risk assessment may not have collected sufficient information at subsequent incidents to assign the suspect appropriately, meaning they likely moved from their respective type into a type 3 involving 'no discernible features'. This could account for the movement from type 4 to type 3 ( $n = 198, 55.8\%$ ), and for movement from type 2 to type 3 ( $n = 27, 48.2\%$ ).

Figure 19: Cluster transition in suspects with more than one recorded incident

### Cluster progression (for cases with more than 1 incident)



## *Summary*

The cluster analysis formed a four cluster solution across 92 case characteristics. It found that majority of cases fell into a 'holding cluster' (type 3 – no discernible features), which was possibly a result of the left truncated data from the police systems or unexplained/unrecorded dynamics from assessments. Subsequently, the cluster existed due to the lack of information with the case also not fitting the types apparent within the other clusters. The clusters were interpreted based on characteristics that feel close to a z score of 1, with the interpreted cluster subsequently being defined as a 'type' within the overall typology.

From type 3, there appeared to be three types of more harmful/dysregulated types of suspects. Type 1 – those who engaged in partner abuse as well as CPDA and had a broad criminal history in short time period. Type 4 – those where the victim had identified escalating issues, usually due to the suspect having a mental health issue, or issues with drugs and alcohol preventing them from leading a normal life. Finally, type 2 – those suspects where the victim reported coercive and controlling behaviours, with the cases often being medium or high risk according to the DASH risk assessment.

## Results Chapter 4: Psychological Contextualisation of CPDA

To provide context to the quantitative results throughout the report, the analysis concerned a deep dive of randomly selected police cases. This section of the report is the 'psychological contextualisation' as it was focused on using a template designed specifically for this project to capture psychologically relevant information. This template was developed prior to the deep dive and aimed to capture indicators of psychopathology observed within the systematic literature review. For ease of discussion, it is termed the psychopathology template (PT) in this report. Therefore, the analysis aimed to use the information captured using the PT to begin building a picture of the suspects' psychopathology from behaviours detailed in police case information. The purpose of doing so was to better understand the findings of the cluster analysis and whether this fits with the IPV typologies detailed in the last chapter.

Use of the PT involved coding a trait as present whenever there was evidence of it within the narrative of the police case file or recording where a specific diagnosis had already been made. The overall coding of psychological traits is presented in Table 11 (p.104). Of note, the coding of traits and diagnoses is not mutually exclusive, meaning a single suspect could be both diagnosed and/or displayed traits consistent with several other conditions.

Generally, the cases indicated a range of behaviours and traits indicative of a wide variety of conditions. Whilst one suspect was coded as being diagnosed with ADHD, schizophrenia and psychosis (accounting for majority of the diagnoses), there was a range of behaviour across the sample that indicated a variety of psychopathology. What was apparent from the case files was how many of these issues began at an early age for the suspect. Further exploring the history of the child and their parents allowed the research team to uncover significant mental health issues present for some of the cases between the ages of 13-16 years, with the suspect displaying a range of self-harming behaviours, involvement with OCGs, and/or had confirmed diagnoses for mental health issues/brain injury. This included a diagnosis for bipolar in one suspect and a diagnosed brain injury from a car crash in another. It appeared temporally that the subsequent dysfunction may have emanated from these conditions/traits, impacting on many relationships around the suspect. This supports the cluster interpretation as they were both physically and verbally abusive to a range of people

in their lives, including parents and grandparents, other family, partners, friends, and in some cases strangers and emergency service staff.

Taking each type in turn, within type 1 (mixed subjects cluster) suspects there were five formal diagnoses across the seven sampled cases spread across the different psychopathologies. The type appeared very similar in presentation to the generally violent aggressor (GVA) established by Holtzworth-Munroe and Stuart. Interestingly, there were no formal diagnoses of ASPD in type 1 which contradicts the GVA type. However, across the cases sampled there were no diagnosis of ASPD within any of the types, suggesting that this is a personality disorder not commonly recognised in a community sample. In terms of traits, type 1 suspects included indicators of ASPD, EUPD, PTSD and ADHD, with the ASPD and PTSD being consistent with Holtzworth-Munroe and Stuart's GVA type. The link between ASPD and PTSD is consistent with research that continues to find that adverse childhood, and adult, experiences are common in the lives of people with ASPD (Stoffel et al., 2019; Schorr et al., 2021). Finding both EUPD and ASPD is also consistent with the literature that these frequently co-occur (e.g., Marsden., 2019), but not Holtzworth-Munroe and Stuart's types. The finding of ADHD in type 1 is consistent with the GVA type, since the risk of children with ADHD developing later onset ASPD is significant (Storebø & Simonsen, 2016). Therefore, the psychological contextualisation broadly supports the association between type 1 CPDA and GVA IPV. However, more generally, consistent with the literature on comorbidities, type 1 suspects were found to demonstrate a range of additional indicators of diverse psychopathologies including bipolar, depression, psychosis as well evidence of previous trauma.

Table 11: Psychological contextualisation coding broken down across the cluster labels

Type	Psych Context	ASD	ADHD	PTSD	EUPD	ASPD	Major Depression	Bipolar	Schizophrenia	Psychosis	Brain Injury
Type 1: mixed subjects (n = 7, 100.0%)	Diagnosed	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (14.3)	1 (14.3)	1 (14.3)	1 (14.3)
	Traits	2 (28.6)	3 (42.9)	5 (71.4)	5 (71.4)	5 (71.4)	3 (42.9)	3 (42.9)	1 (14.3)	1 (14.3)	0 (0.0)
	No traits	5 (71.4)	3 (42.9)	2 (28.6)	2 (28.6)	2 (28.6)	4 (57.1)	3 (42.9)	5 (71.4)	5 (71.4)	6 (85.7)
Type 2: coercive and controlling (n = 2, 100.0%)	Diagnosed	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Traits	1 (50.0)	0 (0.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)
	No traits	1 (50.0)	2 (100.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	2 (100.0)	2 (100.0)	2 (100.0)
Type 3: no discernible features (n = 15, 100.0%)	Diagnosed	0 (0.0)	2 (13.3)	0 (0.0)	0 (0.0)	0 (0.0)	2 (13.3)	0 (0.0)	0 (0.0)	1 (6.7)	0 (0.0)
	Traits	3 (20.0)	0 (0.0)	5 (33.3)	6 (40.0)	6 (40.0)	3 (20.0)	3 (20.0)	0 (0.0)	1 (6.7)	0 (0.0)
	No traits	12 (80.0)	13 (86.7)	10 (66.7)	9 (60.0)	9 (60.0)	10 (66.7)	12 (80.0)	15 (100.0)	13 (86.7)	15 (100.0)
Type 4: fear of escalation (n = 10, 100.0%)	Diagnosed	1 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (10.0)	1 (10.0)	0 (0.0)
	Traits	1 (10.0)	1 (10.0)	6 (60.0)	7 (70.0)	5 (50.0)	2 (20.0)	1 (10.0)	4 (40.0)	1 (10.0)	0 (0.0)
	No traits	8 (80.0)	9 (90.0)	4 (40.0)	3 (30.0)	5 (50.0)	8 (80.0)	9 (90.0)	5 (50.0)	8 (80.0)	10 (100.0)



The two suspects in type 2 (coercive and controlling) initially appeared to provide a broad and/non-conclusive coding of behavioural issues within the cases. Upon review of the notes kept by the researchers who underwent the coding, both cases carried limitations in their reviews. Within one case, the police had identified that the victim (mother) was very unwell and displayed a range of mental health issues. Following the officer's investigation, it appeared that the victim was in need of additional support, with evidence suggesting that the suspects had been acting in a caring capacity for the victim. The second case involved a suspect who displayed a broad range of worrying behaviour, but most notably had numerous traits for major depression over a prolonged period. Within the case file, the suspect had committed suicide and information prior and post the incident added little additional context. Due to the small sample of type 2 it is not possible to explore this type in terms of IPV typologies or cluster profiles.

Type 3 related to cases clustered together with no discernible features and most closely resembles the family only (FO) type of IPV perpetrator from Holtzworth-Munroe and Stuart's typology. Amongst the 15 cases there was only five diagnoses. There was however evidence of traits of EUPD which is consistent with a sample containing a larger proportion of female perpetrators (e.g., Hoertel et al., 2014). There was also evidence of traits of ASPD, PTSD, ASD, depression, bipolar and one case of psychosis. Therefore, although there were indicators of psychopathology, they appeared to be non-specific to any type. Majority of the cases in type 3 either contained no information that indicated behavioural issues, or involved suspects who were generally anti-social and had issues with controlling their anger (indicating possible ASPD or EUPD). This also included suspects who had aggressive outbursts, but such behaviour could have been linked to PTSD (for example one suspect had stopped his mother committing suicide multiple times as she was trying to 'escape' a violent partnership). This contrasted directly to a small number of cases where the suspect was diagnosed or had traits consistent with other conditions, such as major depression, ADHD, and psychosis. In a separate case with no diagnosis, the suspect displayed a variety of traits consistent with psychosis, including disclosing that he believed there was an apocalypse and was engaging in violent behaviour to survive. Overall, the behaviours included within type 3 (no discernible features) seemed mixed, with cases either involving a suspect with seemingly no behavioural issues, suspects

with possible ASPD/EUPD/PTSD, and those with distinct behavioural issues, such as depression, ADHD and psychosis.

Finally, type 4 (fear of escalation) was a type generated around the victim reporting that abuse was becoming more frequent, and they were scared. In terms of IPV typologies these were theorised to best fit Holtzworth-Munroe and Stuart's 'dysphoric' perpetrator with a history of neglect in childhood and where abusive behaviour was motivated by EUPD traits, often associated with depression, suicidality and substance abuse. Whilst at first glance Table 11 appears to indicate a group of suspects with a broad and indistinguishable array of behaviours indicative of psychopathology, the information gleaned from the case files indicated a more coherent organisation to this type. This included formal diagnoses for ASD, schizophrenia and psychosis, all of which were medicated and involved care services. Other cases appeared to involve more specific issues, such as PTSD, where suspects were ex-military or ex-sex workers, and other cases with suspects displaying symptoms of major depression with previous suicide attempts. There were also a couple of cases where the suspect displayed behaviour that was dysfunctional indicating EUPD and/or schizophrenia, but there was not enough information within the case files to explore the suspects behaviour further. Overall, the suspects within type 4 (fear of escalation) seemingly involved cases where the suspects had more specific behavioural issues. These issues appeared to relate to particularly unsettling behaviours (schizophrenia, psychosis, depression with suicide attempts, PTSD with aggressive outbursts) whereby the victim involved in the incident was particularly unsettled by the behaviour and reported being fearful in the DASH risk assessment. This explanation appeared plausible given that, in the case of ASD, the autistic male was around seven foot in height and weighed close to 25 stone. In cases where the suspect engaged in 'meltdown' behaviour due to ASD, the parents called police for support and reported being scared mainly due to the size and lack of control they had over the suspect.

### ***Additional Notes***

Throughout the coding of the psychological contextualisation, the researchers identified several additional pieces of information that were not being captured by the PT but provided useful additional context to the case. Notes were recorded freely on an additional page of the

coding template. Due to the relationship between ACEs and violent criminality (Fox et al., 2015; Hill & Nathan, 2008) and family abuse (Herrenkohl et al., 2022; Lünemann et al., 2019) case note reviewers also explored evidence of potential adverse childhood experiences of the suspect or parents/carers. Bellis et al. (2019) reviewed the literature and found that ACEs were significantly associated with psychopathology in high income countries such as the UK. Exposure to at least one ACE is common, but even exposure to only one ACE can have detrimental impact if that ACE is particularly extreme such as childhood sexual abuse and traumatic separation from a caregiver and are associated with serious clinical presentations of mental illness. There is also a reliable dose-response relationship between cumulative exposure to a range of ACEs and both common (Sahle et al., 2021) and the most serious clinical presentations of psychopathology. For example, Gloger et al. (2021) found that ACEs were associated with 62% of previous psychiatric admissions, 45% of high suicide risk, and 15% of recurrent depression in their sample. Similarly, growing-up in areas of deprivation, being placed out of the family (e.g., fostered, adopted), childhood emotional and physical neglect, and childhood physical sexual and emotional abuse are all significantly associated with delusions, and sexual or physical abuse associated with hallucinations and paranoia (Grindey & Bradshaw, (2022).



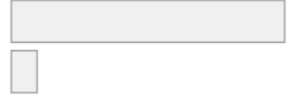
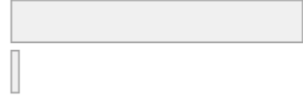
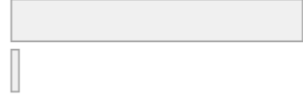
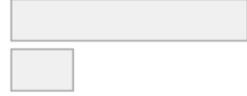
The literature is clear that ACEs are predictive of later psychopathological (antisocial behaviour, depression, and other psychiatric traits) and behavioural outcomes. Therefore, the contribution of ACEs to CPDA is important to explore because “comprehending the pathways from child maltreatment to psychopathology in their full complexity will be essential to build efficacious preventive and therapeutic protocols” (Maglione et al., 2018; p.53). Therefore, this project attempted to capture adverse experiences (e.g., exposure to IPV, parental mental health, neglect, parental criminality), or indicators of them (e.g., suicidal behaviour, substance abuse) of the suspects in childhood.

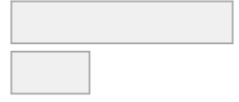
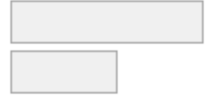
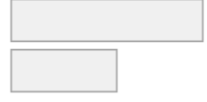
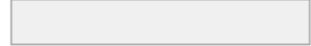
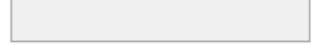
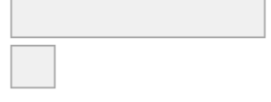
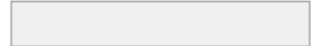
The procedure for capturing information on suspect ACEs involved exploring the incident history of the suspect, the carers and other family members linked with the suspect within the police case file information. For example, where parents had IPV incidents this was recorded as exposure to IPV of the suspect; where the suspect had ‘vulnerable’ child markers in the files this was recorded as neglect or abuse (dependent on the nature of the

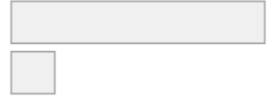
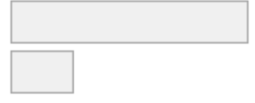

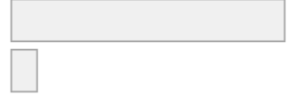
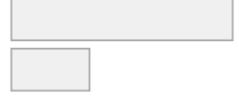
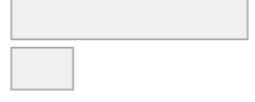
vulnerability); if siblings of the suspect and the suspect showed similar psychopathology and/or harmful behaviour this was interpreted as indicative of childhood family dysfunction.

These were then summarised and collated (see Table 12).

Table 12: Additional themes coded against casefiles during psychological contextualisation

No	Variable	Stats / Values	Freqs (% of Valid)	Graph
1	ACES: Care	1. Not Present 2. Present	32 (94.1%) 2 ( 5.9%)	
2	ACES: Neglect	1. Not Present 2. Present	25 (73.5%) 9 (26.5%)	
3	ACES: Sexual Abuse	1. Not Present 2. Present	31 (91.2%) 3 ( 8.8%)	
4	ACES: Physical Abuse	1. Not Present 2. Present	33 (97.1%) 1 ( 2.9%)	
5	ACES: Emotional Abuse	1. Not Present 2. Present	33 (97.1%) 1 ( 2.9%)	
6	ACES: EIPV	1. Not Present 2. Present	27 (79.4%) 7 (20.6%)	

No	Variable	Stats / Values	Freqs (% of Valid)	Graph
7	ACES: Parent Mental Health	1. Not Present 2. Present	25 (73.5%) 9 (26.5%)	
8	ACES: Parent Substance Misuse	1. Not Present 2. Present	22 (64.7%) 12 (35.3%)	
9	ACES: Offending Parent	1. Not Present 2. Present	22 (64.7%) 12 (35.3%)	
10	ACES: Nonfamilial Sexual	1. Not Present	34 (100.0%)	
11	ACES: Nonfamilial Physical	1. Not Present	34 (100.0%)	
12	ACES: Other	1. Not Present 2. Present	29 (85.3%) 5 (14.7%)	
13	Suspect Risk: Criminality Non-Family	1. Not Present	34 (100.0%)	

No	Variable	Stats / Values	Freqs (% of Valid)	Graph
14	Suspect Risk: Substance Use	1. Not Present 2. Present	29 (85.3%) 5 (14.7%)	
15	Suspect Risk: Self-Harm and/or Suicide	1. Not Present 2. Present	27 (79.4%) 7 (20.6%)	
16	Suspect Risk: Mental Health	1. Not Present 2. Present	12 (35.3%) 22 (64.7%)	
17	Suspect Risk: Victim of IPV	1. Not Present 2. Present	31 (91.2%) 3 ( 8.8%)	
18	Suspect Risk: Nonfamilial Assault	1. Not Present 2. Present	25 (73.5%) 9 (26.5%)	
19	Suspect Risk: IPV Perpetrator	1. Not Present 2. Present	27 (79.4%) 7 (20.6%)	

## *Summary*

Overall, there was evidence and/or indicators of multiple ACEs within the lives of the CPDA suspects. In terms of direct ACEs, a third of suspects had indications of exposure to parental mental illness, parental criminality, IPV between carers and neglect. Almost a third were victims of childhood assault from non-family perpetrators and one in ten victims of sexual abuse including rape (with both male and female suspects as victims of this). Indicators of ACE exposure included two thirds of suspects having indicators of mental health difficulties, one in five self-harmed.

## Results Chapter 5: Prolific CPDA Networks, Top Offenders, and cases of (Attempted) Parricide

As research into CPDA has developed over recent decades, a better understanding of its complexities has encouraged further questions to develop awareness of the longer term and broader implications of harm on those caught up in such abuse and violence. Similarly, over recent years the impact and longer-term effects of witnessing or suffering trauma, even at a very early age, has become the subject of extensive academic research. Such research has outlined how children can suffer in the long-term and, as a result, can develop behavioural problems (Holt, 2017a). DA can lead to problems in children that shape their behaviours and personality into adulthood (Millar *et al.*, 2019). Accordingly, it has been widely argued that the witnessing of such abusive behaviour between parents or towards parents, within an 'intimate partner' setting has contributed to ensuing abusive behaviour on the part of children to those same parents (Daly & Wade, 2015).

Many CPDA researchers have suggested that the most serious incidents of abuse perpetrated against parents are committed by those in their early teenage years, with this then continuing as the children grow older (Ulman & Straus, 2000). The infliction of serious violence on parents has been recognised as something that can worsen as children age, and this is particularly evident in adolescent boys (McKenna *et al.*, 2010). It is unfortunate, therefore, that the understanding of the most serious violence, that being fatal and near-fatal violence towards parents, has also been misunderstood by policy makers. It is argued that such violence has not seen the same extent of action and intervention, as that seen relating to intimate partner and child-abuse related violence (Holt, 2017b).

Time and again, particularly 'complex' cases within the arena of the already 'complex' field of CPDA are seen as matters that are exceptionally difficult to deal with (Biehal, 2012). Cases where there is a lack of effective parenting, where parents have their own safeguarding needs, or where alcohol and substance abuse are evident pose particular problems for services to effectively intervene and disrupt recurring CPDA (Routt & Anderson, 2011).

The following chapter focuses on the most complex and serious cases of CPDA in which intervention could have the greatest impact. These include cases where offenders are part of



large networks, commit a high volume of offences, and commit high harm offences (such as attempted parricide and homicide).

### ***Individuals with Expansive Networks of Harm***

Some cases of CPDA involve a single nominal acting against a single victim. In other cases, CPDA is part of a broader pattern of criminal behaviour, in which a nominal perpetrates CPDA and other offences against multiple victims. Nominals can also have personal connections to other offenders, each with their own set of victims. Given that prior experience of abuse and exposure to violence are risk factors for some crimes, these victims may themselves go on to become offenders. The result is a complex network comprised of individuals who are offenders, victims, and both offenders and victims (hereafter 'victim-offenders').

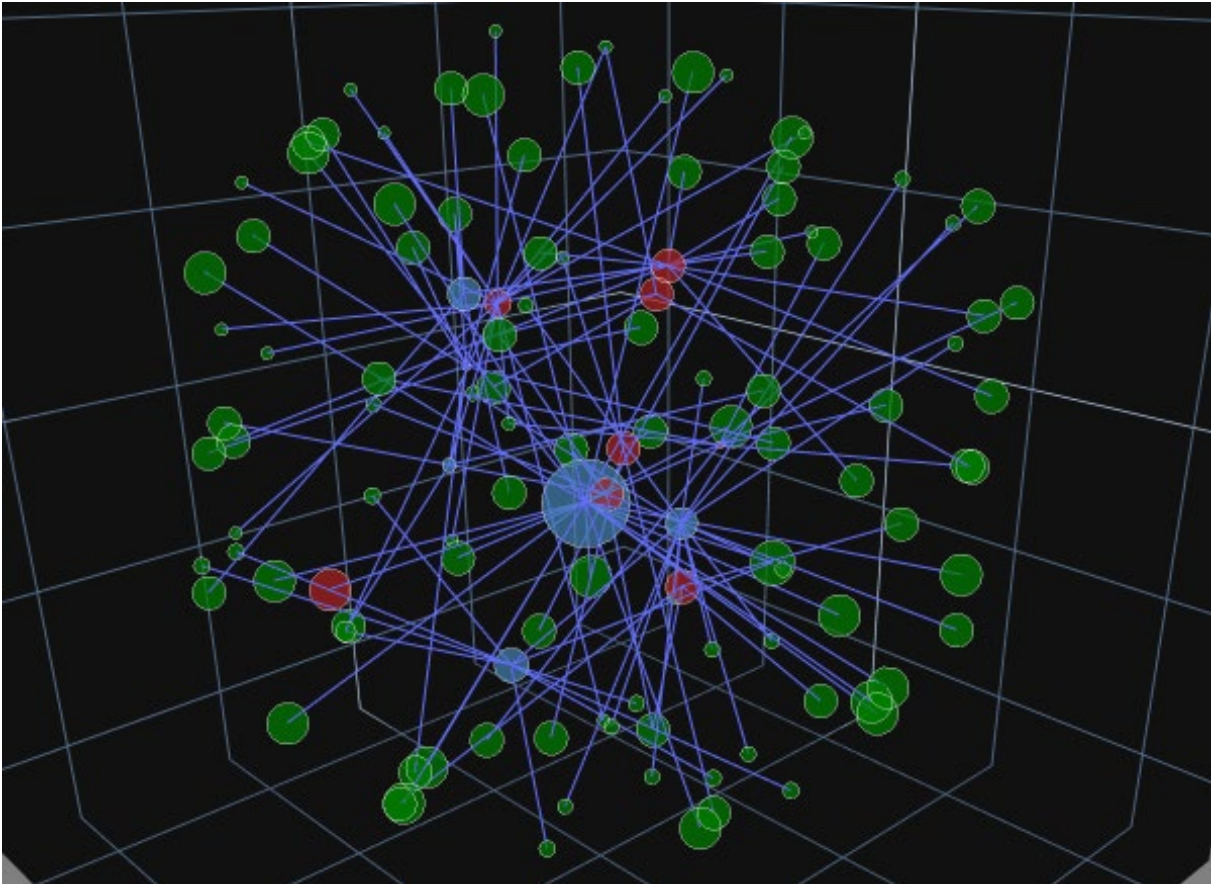
### ***Examples of Individuals with Expansive Networks***

Figure 20 provides a visual representation of the broadest network in the dataset. The large blue circle at the centre represents the main nominal in this network, who is both a perpetrator and a victim of crime. The network surrounding this nominal consists of 118 other individuals, including five victim-offenders (shown by the blue circles), eight offenders (the red circles), and 105 victims (the green circles).<sup>4</sup> Circle sizes are indicative of the significance of the nominal within the network (based on eigenvector centrality) during the study period, with smaller and larger circles representing less and more impactful individuals respectively. These incidents include both CPDA and other crimes (for example, burglary, criminal damage, and violence with or without injury).

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<sup>4</sup> NB: If a crime occurred during the study period, both the offender and victim appear in the network. If a crime occurred outside the study period, the person who committed it is still listed as an offender, but their victim does not appear in the network.

Figure 20: Connections between Offenders, Victim-Offenders, and Victims in the Largest Network



Some of the connections between the central nominal and other individuals in the network are simple and straightforward: for example, where this nominal offended against a particular victim or was the victim of a particular offender (see Figure 21.1: the relationships mentioned are shown by the dotted yellow lines). Other connections are more complex and involve several degrees of separation between the main nominal and others in the network: for example, where this main (male) nominal offended against a (female) individual who was also the victim of another (female) victim-offender; this (female) victim-offender had ties to another (male) victim-offender, who had his own set of victims (see Figure 21.2). Notably, several individuals in the network were victimised by more than one offender or victim-offender. In most of these cases, there were no connections between the offenders and victim-offenders outside of the shared victim.

Figure 21: Network connections between individuals

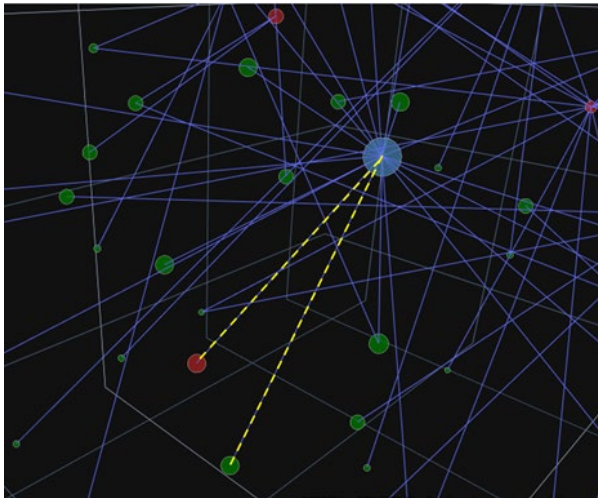


Figure 21.1. Examples of Straightforward Connections Between Central Offender and Others in the Network



Figure 21.2. Examples of Complex Connections Between Central Offender and Others in the Network

There were more male offenders (75.0%), victim-offenders (66.7%), and victims (52.4%) than there were female offenders (25.0%), victim-offenders (33.3%), and victims (41.9%) in the network.<sup>5</sup> Notably, females were more likely to be victimised by other females in comparison to male (as 30.4% of female victim-offenders and victims were targeted by women, compared to 18.6% of male victim-offenders and victims). The ages of the victim-offenders and victims in the network ranged from 7-79 years ( $M=38.7$ ,  $SD=17.0$ ).

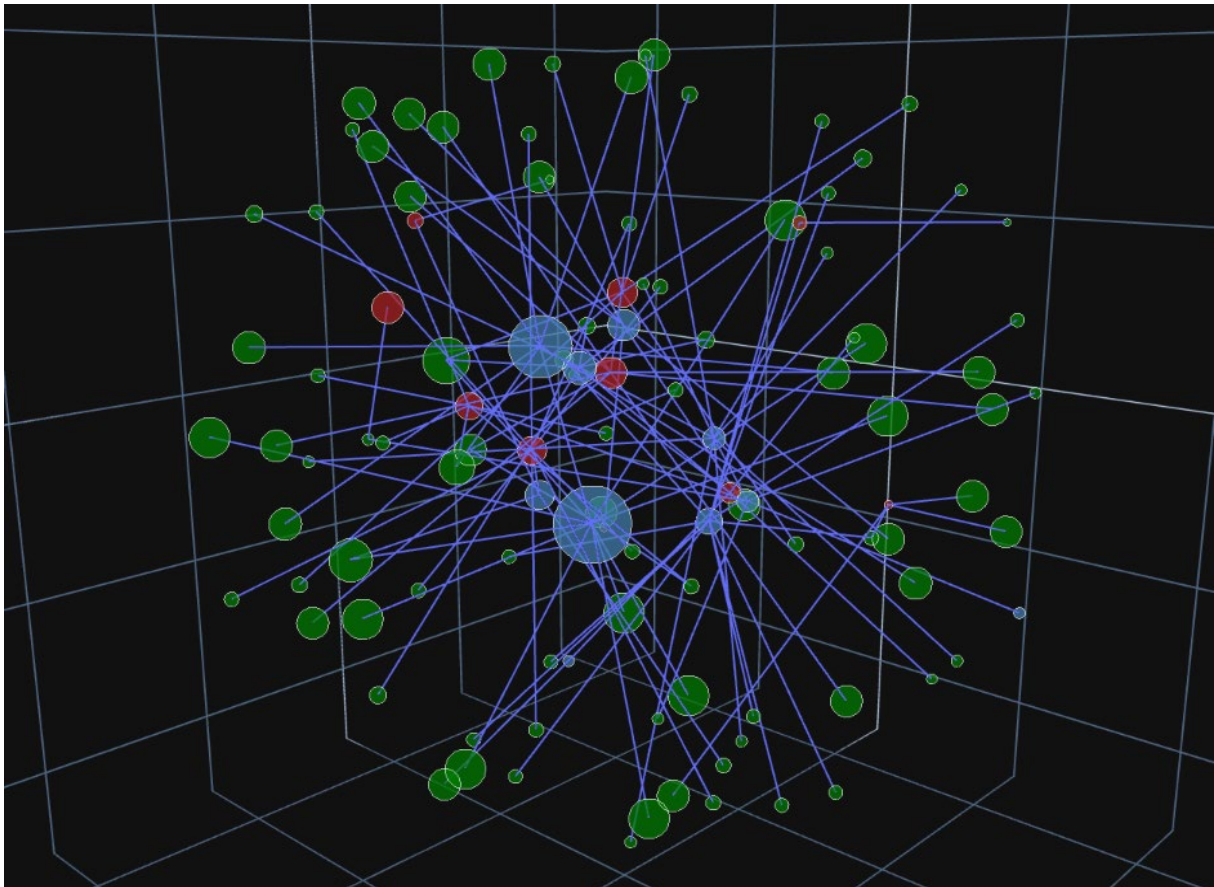
The offences committed by members of the network occurred in several different locations in the same geographic area. The largest number of incidents took place near Blackburn (77 events involving 42 victims) whilst the smallest number transpired near Weir (four events involving three victims) (see Figure 22).

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<sup>5</sup> NB: For the remaining 5.7 percent of victims, gender was not recorded.



Figure 23: Connections Between Offenders, Victim-Offenders, and Victims in the Second Largest Network



Several individuals were victimised by more than one offender or victim-offender in the network (Figure 24.1). In most of these cases, there were no connections between these offenders and victim-offenders outside of the shared victim. There were, however, a number of smaller clusters of offenders and victim-offenders within the larger network: Figure 24.2 provides an example in which a female victim-offender has direct relationships to a male offender and to both male and female victim-offenders.

Figure 24: Shared victims and clusters of victim offenders

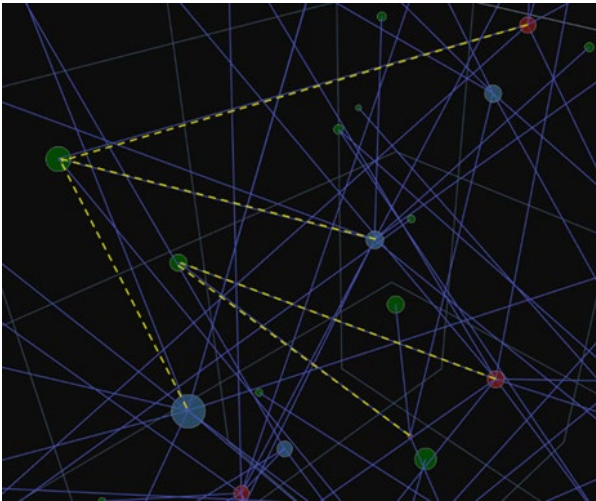


Figure 24.1. Examples of Individuals Being Victimised by Multiple Offenders in the Network

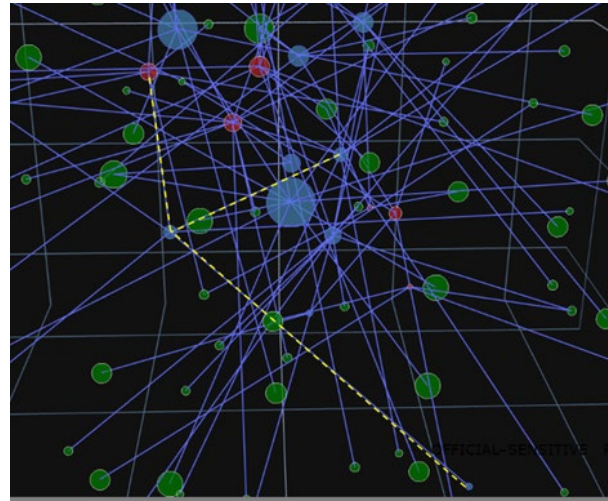
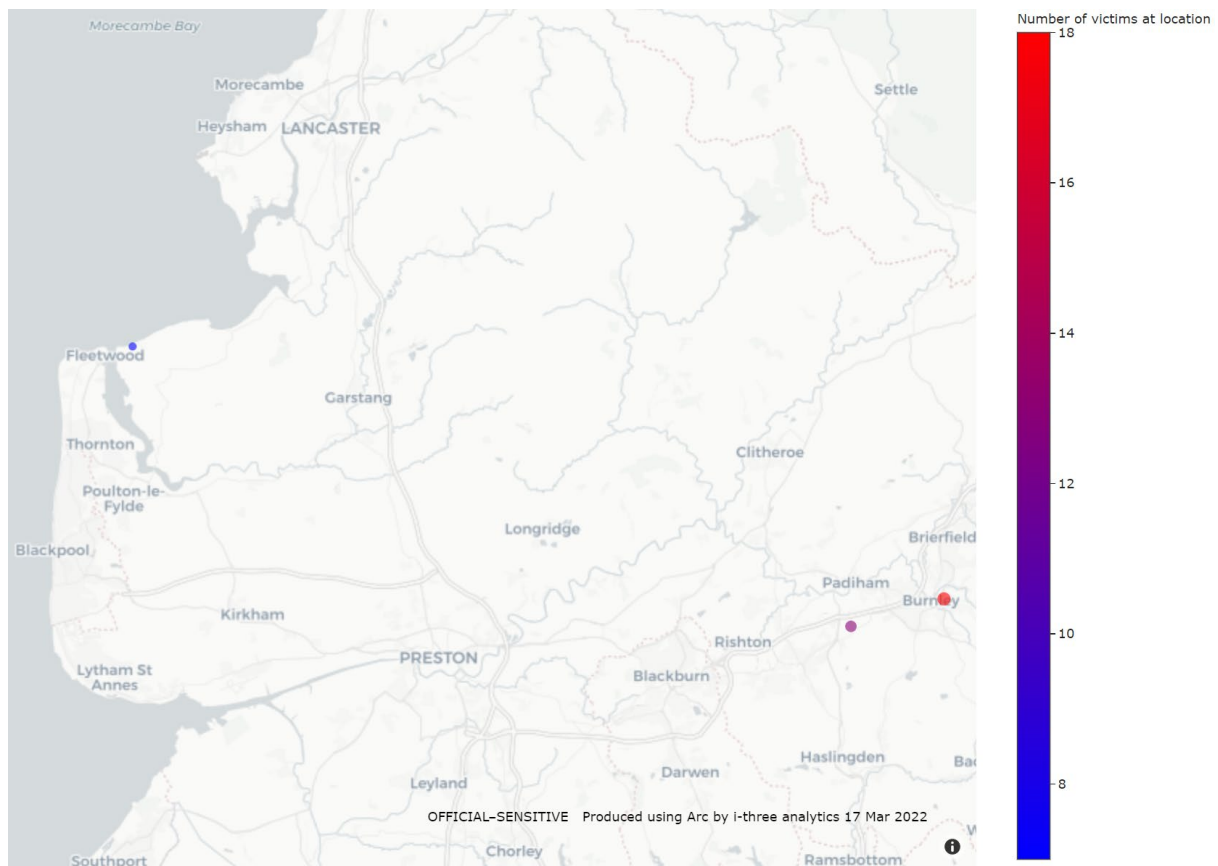


Figure 24.2. Example of Smaller Clusters of Offenders and Victim-Offenders in the Network

Most of the offenders (80.0%), victim-offenders (80.0%), and victims (55.4%) in this network were male. The ages of the victim-offenders and victims ranged from 14 to 76 years ( $M=35.5$ ,  $SD=13.9$ ). Relative to the first network, the offending occurred in a smaller number of locations spread over a wider geographic area. The largest number of incidents took place near Burnley (25 events involving 18 victims) whilst the smallest number transpired near Fleetwood (10 incidents involving seven victims) (see Figure 25).

Figure 25: Locations of Offences in the Second Largest Network



### ***Examples of Individuals with Small Networks***

In contrast to the previous two examples, Figure 26.1 depicts one of the smaller networks in the dataset. This centres around a female nominal who committed offences against nine victims. Her victims were all male (with one exception) and aged between 30 and 58 years. The 29 offences perpetrated against these victims all took place within a small geographic area near Preston (Figure 26.2).

Figure 26: Connections and location of a small network

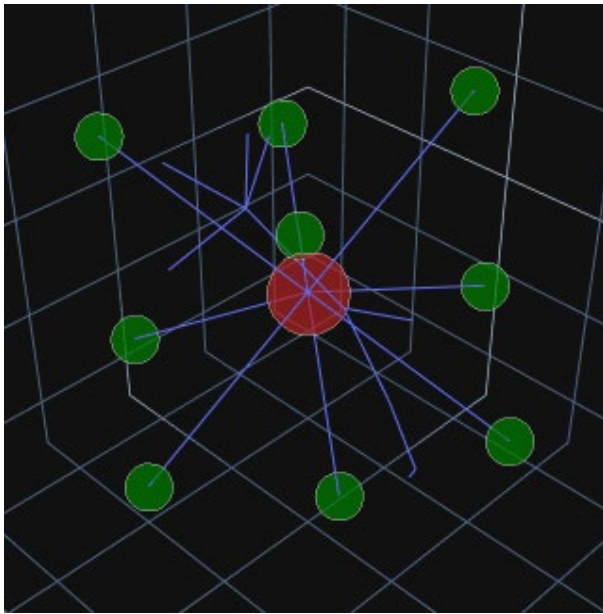


Figure 26.1. Connections Between Offender and Victims in One of the Smallest Networks

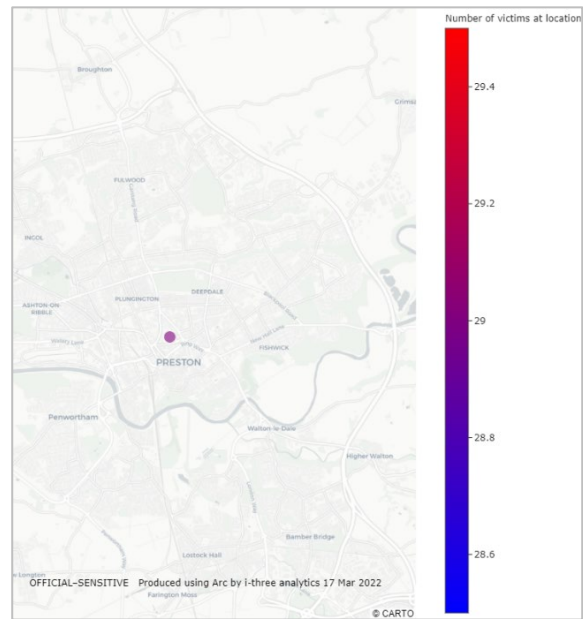


Figure 26.2. Locations of Offences in One of the Smallest Networks

These examples illustrate that, in complex cases, CPDA can occur as part of a broad pattern of criminal behaviour and in the context of a wide web of relationships. Notably, many of the networks in the dataset contained individuals who were both perpetrators and victims of abuse and other crimes. This is consistent with the literature, which indicates that prior experience of abuse and exposure to violence are risk factors for engaging in abusive and criminal behaviour. It also highlights the importance of breaking the cycle to prevent the creation of future abusers. Doing so has the potential to significantly lessen the harm experienced by some people, given that all of the networks shown contained examples of individuals who were victimised by multiple different offenders or multiple times by the same offender.

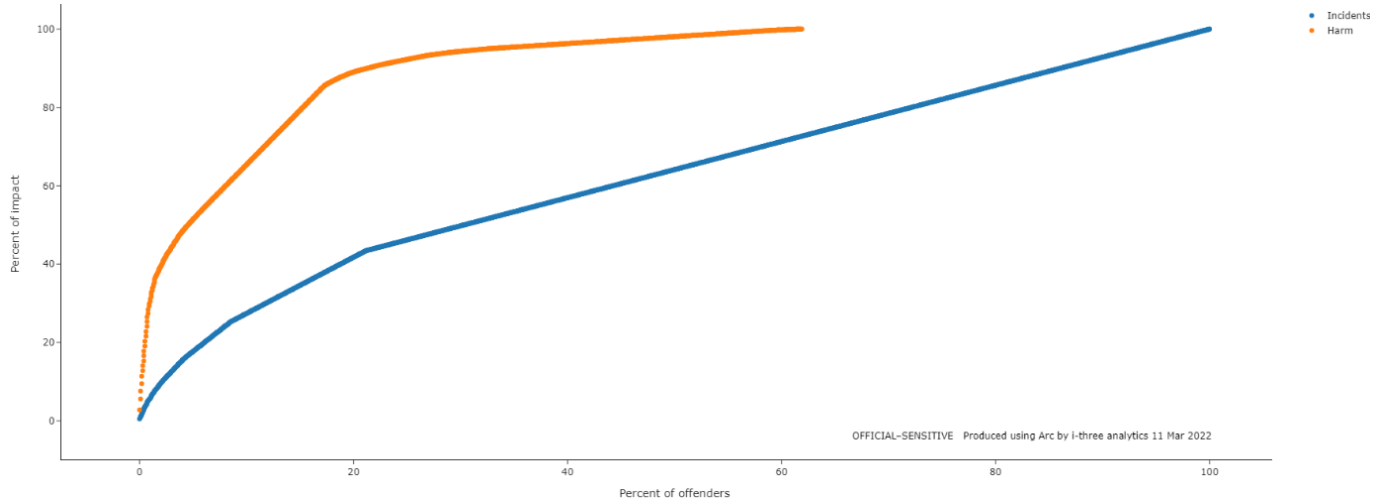
### ***Individuals Committing High Volume and High Harm Offences***

A small proportion of nominals were responsible for a large proportion of incidents and harm caused by incidents (as measured by the Crime Harm Index). In the year of November 2020 to November 2021, for example, 20 percent of offenders accounted for 41.7 percent of



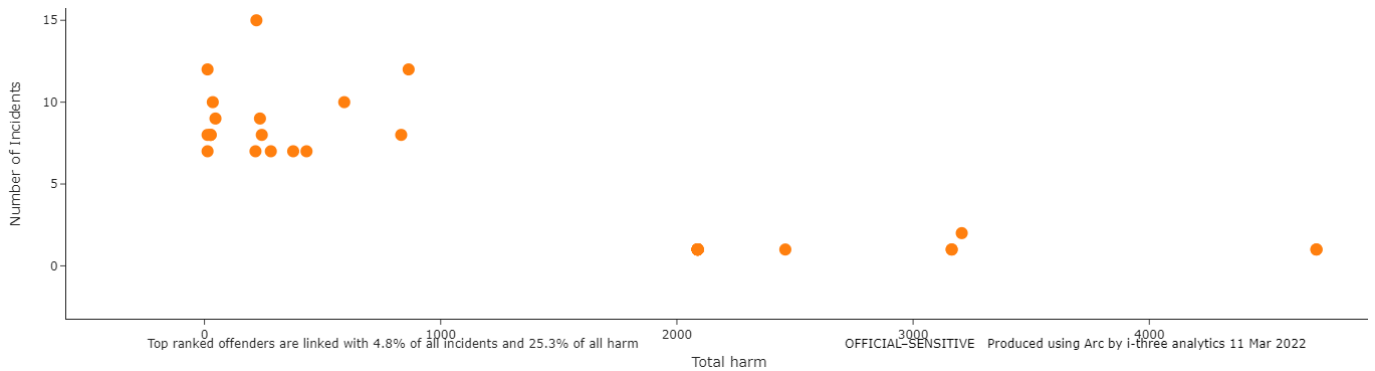
incidents and 89.0 percent of harm (see Figure 27 below). In the same period, 5 percent of offenders were responsible for 17.7 percent of incidents and 51.3 percent of harm. Overall, this suggests that intervening in a small number of cases could result in a substantial reduction in the number of CPDA incidents, and harm caused by CPDA incidents, each year.

Figure 27: Percent of Impact per Offender between November 2020 and November 2021



Some examples of cases that could be prioritised for intervention are identified in Figure 28 (next page), which plots total incidents against total harm for two groups of nominals: those with the highest cumulative number of incidents, and those with the highest cumulative ONS Crime Severity Index scores, between November 2020 and November 2021. There was substantial overlap between the groups, as nominals who committed a large number of low-harm offences tended to have high cumulative harm scores. These prolific offenders (clustered on the left-hand side of Figure 28) were each responsible for between 7-15 incidents during the reporting period ( $M=9.0$ ,  $SD=2.3$ ). There was, however, another group of nominals (clustered on the right-hand side of Figure 28) who committed a small number of high-harm offences, such as rape, wounding, and attempted parricide. Most of these offenders were not connected to any other incidents during the reporting period. It is unclear whether this is because they were involved in other events that went unreported, or because the incident marked a sudden escalation in their behaviour.

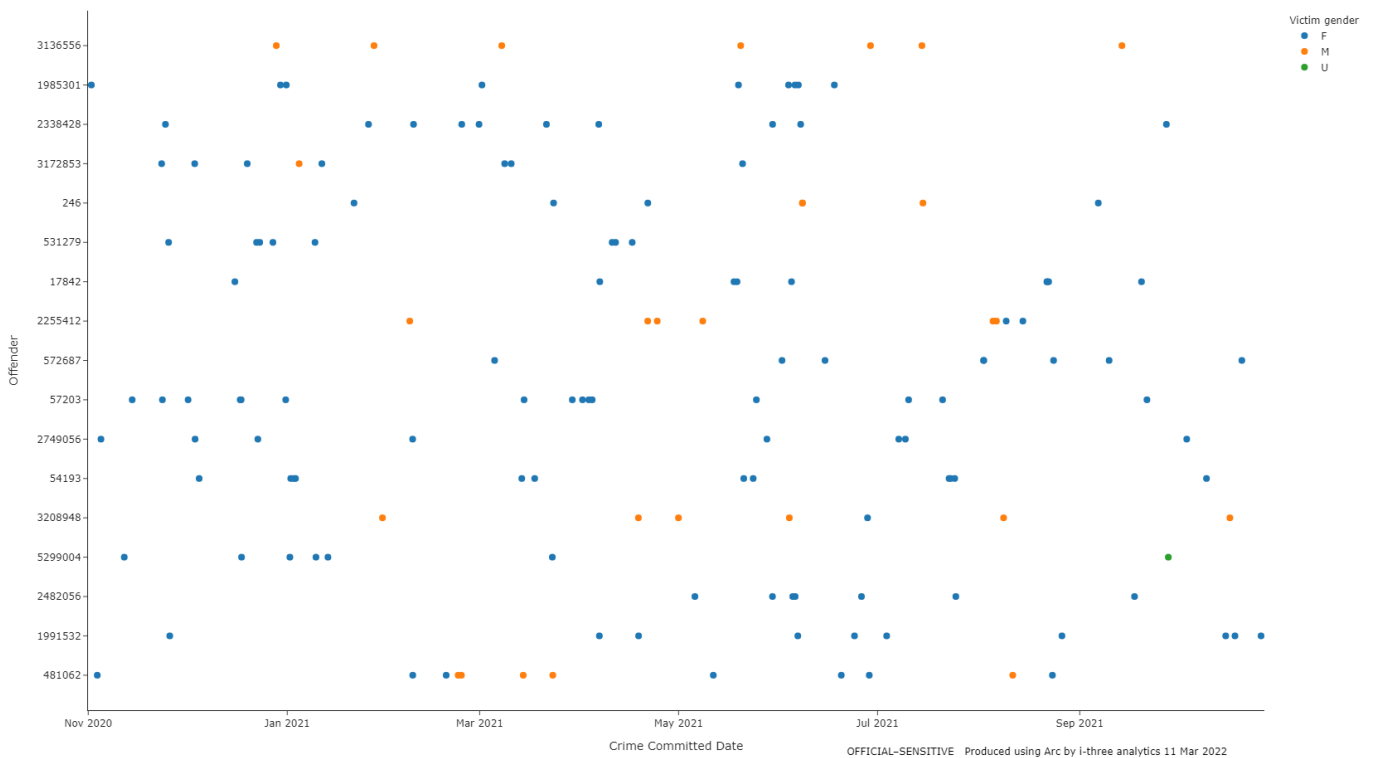
Figure 28: Top Offenders by Incidents and Harm between November 2020 and November 2021



### Individuals Committing Highest Volume Offences

The pattern of offending was consistent across the nominals who committed a large number of low-harm offences between November 2020 and November 2021 (see Figure 29 these are the same individuals as appeared in the cluster on the left-hand side of Figure 28). This pattern involved an initial CPDA event or series of events, followed by a gap of several weeks or months in which no abuse occurred, before the cycle repeated. Notably, most incidents perpetrated by high-volume offenders involved female victims. Some offenders acted against the same individual across multiple incidents, whilst others targeted different victims.

Figure 29: Crimes Committed by Most Prolific Offenders between November 2020 and November 2021



Overall, Figure 29 highlights the large number of CPDA incidents that could be prevented by intervening in a small number of cases. Given that nominals who commit a high volume of low-harm offences tend to have high cumulative harm scores, such intervention would also have a significant impact on their victims.

### ***Parricide and Attempted Parricide Cases***

There were also consistencies in offending across those nominals who committed a small number of high-harm incidents during the study period. The highest harm incidents in the dataset were three attempted parricides and one homicide, all of which occurred between 2019 and 2021.<sup>6</sup>

The perpetrators of these high-harm incidents were aged between 23 and 38 years, whilst the victims ages ranged from 46 to 75 years. Three offenders and their victims were British and White, with the fourth case involving a European mother and son. In the attempted parricides, all three offenders were male: two of these crimes were attempted matricides but, in the third, the gender of the victim was not reported. All three families lived in disadvantaged neighbourhoods in East and West Lancashire (ranked between 10 and 40 percent on the Index of Multiple Deprivation). In the actual homicide, the offender was female, and the victim was her step-grandfather. The family lived in an advantaged neighbourhood in South Lancashire (ranked between 80 and 90 percent on the Index of Multiple Deprivation).

Police data contained no records of any other events linked to the four offenders in the year preceding the crime. However, responses to the Domestic Abuse, Stalking, and Harassment (DASH) checklist indicated that, for three of the four, the crime was not a standalone event but part of an ongoing pattern of abusive behaviour. Specifically, two offenders had previously threatened to hurt or kill either the victim or someone related to the victim (for example, a child or dependent). The third offender had not issued threats, but had previously

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<sup>6</sup> NB: One of the attempted parricides appears on the far right of Figure 28. The remaining attempted parricide and parricide offences occurred outside the time-period covered by this graph.

attempted to inflict harm, first with his own hands and second with an object or weapon. The victim of this latter individual reported that the abuse had become more frequent and severe in the lead-up to the crime. It appears consistent then, that for three of the four incidents were captured by the type 2 (coercive and controlling) labelling, with the remaining case falling into type 3 (no discernible features).

Responses to the DASH also indicated that the same three offenders had experienced mental health issues in the year prior to the crime. One had threatened or attempted suicide, and all three had struggled with mental ill-health and/or substance abuse. This is consistent with the systematic literature review findings, which indicated that a history of mental illness and/or substance abuse is common in CPDA and parricide perpetrators. The DASH also revealed that two of the four offenders had been in trouble with the police in the past, although it was unclear whether this was for CPDA or other unrelated offences. From the psychological contextualisation, the suspects showed traits of psychosis (i.e., being fixated on a knife/talking to themselves loudly in the street). In the attempted parricide that was coded as type 3 (no discernible features), the suspect also displayed traits of Post-Traumatic Stress Disorder (PTSD), Emotionally Unstable Personality Disorder (EUPD) and/or Anti-Social Personality Disorder (ASPD), illustrating a breadth of issues that may not have been solely attributable to psychosis. The case involving the murder of the step-grandfather involved a suspect who displayed a long history of strange behaviour. This involved behaviour such as calling emergency services out to fake incidents, making false criminal allegations against others, and generally manipulative and deceitful behaviour with emergency services and family/friends. Overall, from the psychological contextualisation there appeared to be some indication that brain injury may be present; however, the suspect displayed many traits consistent with learning difficulties and ASPD.

The attempted parricides and homicide all occurred in the late afternoon, evening, or night hours and late in the week (between Thursday and Saturday). Two took place in a domestic location (such as the family home) but the settings for the other two were not recorded. In three cases, the perpetrator was charged and summonsed following the crime. However, one case of attempted parricide encountered evidential difficulties, even though the perpetrator

was known and the victim supported taking further action. This can occur when, for example, a warrant is issued but the suspect disappears and cannot be traced.

Overall, although the sample was small, there were some similarities in offending across those nominals who committed attempted parricide and homicide. In particular, in three of the four cases, the crime was the culmination of a series of abusive incidents perpetrated by the same offender (i.e., all cases were suitably captured as type 2 CPDA suspects).

## Discussion

This report provides an extensive insight analysis across 9,544 police recorded cases of CPDA and presents several ground-breaking findings. Throughout the report (especially the market basket analysis in Results Chapter 1, cluster analysis in Results Chapter 3, and network analysis in Results Chapter 5) results uncovered how CPDA can often occur as part of a broader pattern of criminal behaviour. The psychological contextualisation (Results Chapter 4) found that suspects of CPDA commonly exhibit behaviours that indicate issues with their mental health, suffered from wide variety of ACEs, and/or criminal behaviour and violence was modelled by their parents at a young age. Their experiences throughout adolescence and into adulthood illustrated the array of dysfunction and difficulties faced by both parents/carer and children in forming stable and healthy family relationships.

Furthermore, as the UK continues to move in a direction that causes economic hardship for younger demographics (Stone et al., 2011), the result is likely a greater number of adult children living with their parents/carers which in turn increases the possibility of CPDA. This is somewhat supported by the analysis in the current report, as deprivation appeared as an influential variable with homelessness and arguments over money appearing within the casefile analysis. Using the IMD, the data showed higher levels of CPDA were associated with areas that rank as more deprived in terms of income, education, employment, health, and housing. The data also demonstrated that as age increases, and deprivation decreases incidents of CPDA reduce. Therefore, there may be opportunity to initiate focused awareness campaigns of CPDA via community partnerships in neighbourhoods that have higher levels deprivation. The expectation of future increases of CPDA is also supported by the finding that CPDA rose sharply during the initial months of the Covid-19 lockdown. The trend likely reflected the movement of adult children back into a parent's home as the nation isolated during the pandemic, with the rise in the number of police recorded cases likely illustrating the resulting difficulties between adult children and parents as they underwent a prolong period of confinement together. Consequently, the widely reported increase in demand to domestic abuse charities could have been mainly driven by this increase to CPDA at the outset of lockdown. This could account for a large proportion of the 46% increase in call demand to charities (Gov.uk, 2020) and may well be a significant portion of the 'shadow pandemic' announced by the United Nations (Mohan, 2020).

Furthermore, the harm, severity, and seriousness of CPDA may also be more widespread than initially expected. The current report found that some suspects displayed large and complex networks, made up of offenders, victim-offenders and victims. The largest of these was a network containing 118 individuals, with the network involving harm to 105 victims. The findings illustrate how a policing sample of CPDA includes serious cases and higher harm individuals, an important consideration when discussing the cases in the context of CPDA more broadly (i.e., when situating the findings amongst literature pertaining to all forms of abuse to parents/carers (Condry et al., 2020; Simmons et al., 2017; Holt, 2013; Holt, 2012; Hunter & Nixon, 2012). In higher harm cases, the analysis illustrated the huge amount of complexity surrounding behaviours and parents who also have extensive criminal histories. For example, on face value we may find a case of a male suspect causing criminal damage at their mother's address. However, when considering their criminal history and qualitatively following up the case we find that the suspect is a member of an OCG and is causing damage as he searches his mother's address for a drug rival who is having a sexual relationship with his mother, whereby the mother also has a history of drug dealing and assaults, and all parties are hostile towards police. With several cases having deeply engrained complexities, the analysis highlights how the sole CPDA incident is only a very small part of wider dysfunction. To address this, the market basket analysis suggests that intervention is particularly important for offenders who commit both CPDA and assault with injury, as they are highly likely to have perpetrated, or to go on to perpetrate, other serious or violent crimes. Given the complexities involved in these cases, it is probable that support services would need to be provided by several different agencies working in tandem. As such, there is a need for police and other service providers to develop policies and procedures for recognising complex instances of CPDA and coordinating multi-agency responses to these (for example, through identifying appropriate partners, developing support plans, and assigning roles and responsibilities).

There are also opportunities for police and other agencies to significantly reduce harm by intervening in other high priority cases. In Results Chapter 5, it was reported that a small proportion of perpetrators are responsible for a large proportion of harm caused by CPDA. Perpetrators who cause high levels of harm either commit a large number of low-harm offences or a small number of high-harm offences. Analysis of the highest harm offences in the dataset (three attempted parricides and one homicide) indicates that these are often not

standalone events but part of an ongoing pattern of abusive behaviour. As a result, three of the four perpetrators of these crimes were captured by the coercive and controlling typology formed by this research project. This suggests that individuals in this type may be at greater risk of committing high-harm offences and are in greater need of intervention and support. However, more research is required to determine whether there are higher-risk subgroups within this cluster. As three of the four perpetrators of the highest harm crimes struggled with mental ill-health (psychosis symptoms) and substance abuse in the year leading up to the offence, these may also be important indicators of risk. Whatsoever, the attempted parricides and homicide all occurred in the late afternoon to night hours and late in the week (between Thursday and Saturday). Two took place in a domestic location (such as the family home) but the settings for the other two were not recorded. Overall, the time and place could be attributed to patterns where families are more likely to be together in the family home (after work and weekends) and could be linked to the *Modus Operandi* of the crimes (for example as the suspect waits for the victim to fall asleep before attempting to murder them. As such, there may be critical learning from domestic homicide reviews that involve CPDA that may otherwise not receive the same critical focus afforded to homicide in partner abuse.

### ***The Formation of a Dynamic CPDA Typology***

In beginning to better understand and response to police recorded CPDA, the analysis formed a dynamic typology of cases.

Type 1 (mixed subjects) appeared consistent with Holtzworth-Munroe and Stuart's (1994) generally violent type. These individuals show a pattern of aggression toward both family (carers and intimate partners) and to those outside of the family. Type 1 are likely to be individuals who experienced multiple adversities growing up (Baglivio & Epps, 2016) which would result in difficulties in school, early criminality, and a pattern of using aggression to negotiate relationships and meet their needs (Roberts et al., 2008). The number of adversities a child experiences are positively associated with serious, chronic violent offending (Fox et al., 2015). These suspects are likely to show traits of antisocial personality disorder. (Wertz et al., 2018),



Type 2 (coercive and controlling) had the highest proportion of female victims and was classified predominately on the DASH scores. Type 2 victims appeared willing to engage with the DASH and provided positive responses to multiple items including fear. Threats and coercive control. These cases most closely resemble Johnson's intimate terrorist type (Johnson, 2010). These suspects appear to meet their needs by controlling their environment by using credible threats of violence and intimidation. Carers are likely to be frightened for their own and other family members safety and hence actively support a criminal justice response.

Overall, it appears that Type 3 (no discernible features) was concerned with lower-level incidents with no discernible features, or with incidents where victims chose not to engage with the DASH assessment. Interestingly this cluster had the highest level of male victims and female perpetrators. This suggests that the lack of positive DASH responses could be driven by victim and/or police chivalry towards female perpetrators. Research has found that police treat female offenders more forgivingly than male offenders (Shechory et al., 2019). These biases are likely based on moral values regarding harm and fairness and appear instrumental in guiding altruistic behaviour, with the result that decisions are conditional on the social nature of the law enforcement arm and the offender suggesting that a female suspect can shift both a police officer's and victim's moral cognition such that DASH assessments may be less likely to be completed with a female suspect (FeldmanHall et al., 2016). Additionally, men may be less likely to acknowledge fear or even physical assaults if their assailant is female (e.g., Caspi et al., 2001). Moffitt et al (2001) interpreted these findings as evidence that men do not view women's aggression as assaultive, and therefore they would be unlikely to engage in the criminal justice system. This is consistent with DASH scores having the lowest volume of medium and high and hence largest proportion of standard risk. Indeed, Langhinrichsen-Rohling (2010) suggests that fear as a determining factor may underestimate the prevalence of assaults experienced by men due to men being socialised not to express vulnerability. Consistent with this is that cluster 3 had the lowest proportion of 999 calls and highest proportion of 'other' means of police being alerted.

Type 4 (fear of escalation) appeared best summarised an abusive behaviour stemming from substance use and or suspect mental health difficulties. In terms of Holtzworth-Munroe and

Stuart's (1994) types, these are likely to be similar to the dysphoric type. These suspects are likely to have experienced multiple adverse childhood experiences including neglect. Longitudinally, this is associated both family abuse and general crime and explained by the trait of 'negative emotionality' (Moffitt et al., 2000). High negative emotionality results in low self-control which predicts substance dependence and criminality (Moffitt et al., 2011) and mental illness. Furthermore, Retford (2016; p.120) found that substance use was often used to self-medicate mental health issues, with parents sometimes 'permitting' the use of drugs to control the suspect. As such, parents/carers in these cohorts are more likely to wish for a non-criminal justice response, and instead seek support for their child. However, if the behaviour of their child escalates a criminal justice response may be supported.

### ***Responding to CPDA***

Across all of the types within the current analysis, ACEs indicators were common within the police files although rarely referred to explicitly when the incident was written up. Where suspect vulnerability was explored in the write-up it was far more likely to be when the suspect was female. This is consistent with the general societal narrative that men are perpetrators and women are victims. The presence of trauma as common explanations for the suspects behaviour suggests that CPDA should be addressed through a trauma-informed lens rather than a purely criminal justice lens. Unlike most crimes, victims and perpetrators have a lifetime' (the former) or extensive (the latter) involuntary relationship. These relationships are not easily disentangled or terminated, meaning incidents of CPDA are unique and require a different approach to other forms of domestic abuse (Brennan et al., 2022). Although criminal justice outcomes will be necessary in some cases, mental health approaches that address trauma exposure may be beneficial or even preferable in many cases, as well as restorative approaches to support carers and their offspring to break the cycle of intergenerational trauma. The frequency of ACEs in this sample are high but certainly an underestimate of the true level, range, and severity of the ACEs in the lives of the suspect, carers, and other family members such as siblings who are often witness to the CPDA. A recent review of the literature on routine enquiry regarding client ACEs in mental health services found that most of those who used these services were never asked about child abuse or

neglect. The majority of cases of child abuse or neglect are not identified by mental health services, with estimates range from none to one in 20 reporting ever being asked. Additionally, when researchers collect information on ACEs only 28% of abuse or neglect cases identified by researchers are found in the clients' files, 44% of emotional abuse, 33% of physical abuse, 33% sexual abuse, 17% of emotional neglect, 17% of physical neglect. Interestingly men and those diagnosed with psychotic disorders were the least likely to be asked about ACEs. Male staff were less likely to enquire about ACEs than female staff (Read et al., 2018). Therefore, if mental health professionals fail to identify ACEs in most cases, it is to be expected that the information found in police files is merely the tip of a large iceberg of adversity.

The strength of the current study is that it developed a method of extracting indicators from within police files and this needs to be developed further. The ages of different ACEs should be recorded to understand the likely impact during different developmental stages as research suggests that subjective well-being, mental health and conduct problems are sensitive to the persistence of ACEs and the volume of adversity (Mitchell et al., 2020). Although some research supports the importance of developmental stages of exposure in understanding the likely impact of ACEs (e.g., Yoon et al., 2021) other research does not (e.g., Bauer et al., 2021). Therefore, future research should seek to clarify the impact of ACE exposure and developmental stage and later CPDA.

Also, more widespread change is needed in forming a more appropriate response to CPDA that addresses core difficulties surrounding the topic at present. This includes public-facing awareness campaigns to increase recognition of how to identify CPDA victimisation and what to do about it. This is needed as previous literature has situated CPDA as an issue associated to those under 18 (Holt, 2013). However, cases that involve law enforcement demonstrate this is a relational issue rather than one of age. In line with expectations, the largest relationship type in this sample was blood relative child to parent, and that sons formed the majority of offenders. However, research in population samples regarding prevalence across gender has found no difference between males and females (Simmons et al, 2017), suggesting that similar biases and barriers may be present in CPDA as are in intimate partner violence including the victims not recognising, they are being victimised, shame, fear, or even love

(Hines and Douglas, 2007). In relation to victimisation, awareness is also needed in CPDA victimisation since results from the current study show that offence prevalence may mask the magnitude of harm. Overall, while assault with injury may not present as the most prevalent type of abuse, it produces the highest levels of harm. Taking account of crime harm, as opposed to raw counts has important implications for male victims. While men made up a smaller proportion of victims, they experienced a disproportionate amount of harm due to experiencing more severe types of abuse, such as assault with intent to commit harm. To assess need, resource allocation, and intervention impact, multi-agency approach must take account of prevalence and harm in forming responses to CPDA.

In turn, greater awareness and holistic responses would go some way in addressing the issues in non-reporting (Condry & Miles, 2013) and would allow for better insight into the true extent of the issue. In addition, training, awareness, and multi-agency collaboration are all needed to recognise the problem, form a cohesive and collaborative understanding of the topic as a whole and raise awareness around best practice in responding to families (Brennan et al., 2022). This would also need to include policy and practice around signposting, especially when many victims will raise the issue and seek help via healthcare routes, rather than desiring a criminal justice response. Finally, there is a need to better identify what 'red flags' are measurable and useful across multiple agencies. This is, in part, driven by the limitations in the DASH risk assessment to adequately capture the extensive traumatic history of many suspects, where such information may not only be critical for predicting harm, but for establishing the causative factors that would need addressing in order to prevent the harm from occurring.

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# Appendices

## Appendix A: UCLan Ethical Approval



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Date 2 March 2022

Nathan Birdsall / Nicola Graham-Kevan  
School of Justice / Psychology and Computer Science  
University of Central Lancashire

Dear Nathan and Nicola

**Re: BAHSS2 Ethics Review Panel Application**  
**Unique Reference Number: BAHSS2 0285 Phase 1 and Phase 2**

The BAHSS2 Ethics Review Panel has granted approval of your proposal application 'Child-to-Parent Domestic Abuse Typology'. Approval is granted up to the end of project date\*.

It is your responsibility to ensure that

- the project is carried out in line with the information provided in the forms you have submitted
- you regularly re-consider the ethical issues that may be raised in generating and analysing your data
- any proposed amendments/changes to the project are raised with, and approved, by the Ethics Review Panel
- you notify [EthicsInfo@uclan.ac.uk](mailto:EthicsInfo@uclan.ac.uk) if the end date changes or the project does not start
- serious adverse events that occur from the project are reported to the Ethics Review Panel
- a closure report is submitted to complete the ethics governance procedures (Existing paperwork can be used for this purposes e.g. funder's end of grant report; abstract for student award or NRES final report. If none of these are available use the e-Ethics Closure Report Pro forma).

Yours sincerely

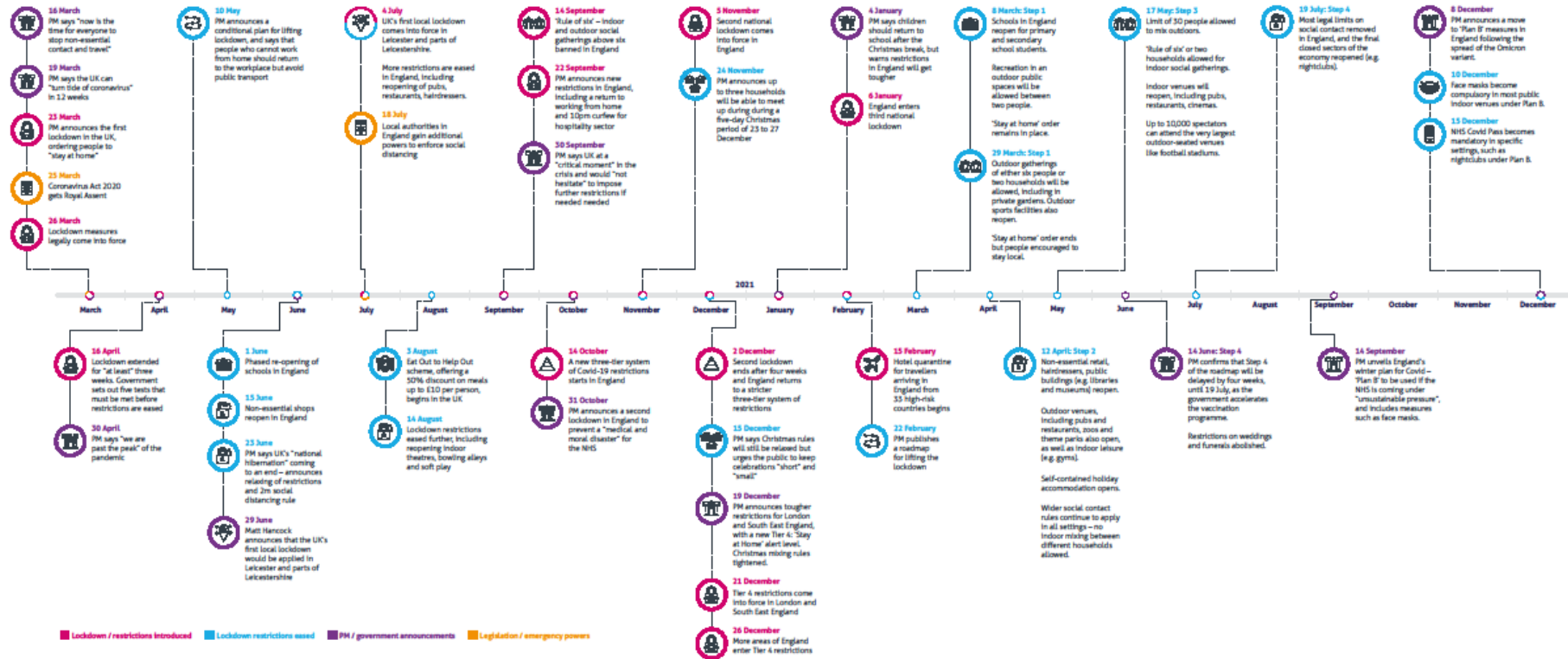
Christine Barter  
Chair  
BAHSS2 Ethics Review Panel

\* for research degree students this will be the final lapse date

*NB - Ethical approval is contingent on any health and safety checklists having been completed, and necessary approvals gained.*

## Appendix B: Timeline of Covid-19 Lockdown Measures

# Timeline of UK government coronavirus lockdowns and measures, March 2020 to December 2021



Source: Institute for Government analysis.

