ORIGINAL ARTICLE

Substance Use and Intimate Partner Abuse (IPA): A Descriptive Model of the Pathways Between Substance Use and IPA Perpetration for Men

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Abstract

Intimate partner abuse (IPA) is a pervasive public health and human rights issue disproportionately affecting women. There is a complex link between IPA and substance use; substance use can increase both the frequency and severity of IPA. Pathway models have been applied to explore heterogeneous trajectories into other behaviours and to identify areas for intervention. This approach has not previously been applied in the area of substance use and IPA. Inductive thematic analysis of 37 interviews with heterosexual men aged 28–52 who had reported previous IPA perpetration was conducted. Men were recruited from alcohol and drug services across two areas of England. Three groupings of pathways into substance use-related IPA were generated: 1) Rule Breaking Pathway ($n = 11$); 2) Entrenched Substance Use Pathway ($n = 13$); and 3) Relationship Insecurity Pathway ($n = 13$). Across the three groupings of pathways, the men's childhood and early experiences led to different journeys into SU-related IPA (abuse that was associated with intoxication, withdrawal, acquisition and substance use lifestyle). Each pathway presented differently with varying core features, for example core features of generalised violence, mental health or jealousy, and different predisposing background factors, including types and timing of childhood abuse and trauma. Adopting a pathways approach drawing on principles of equifinality and multifinality can improve understanding of heterogeneity in men who perpetrate IPA and use substances and propose treatment/intervention targets.

Keywords Pathways approach · Intimate partner abuse · Domestic abuse · Substance use · Intervention · Multifinality · Equifinality

Intimate partner abuse (IPA) perpetration involves any behaviour by an intimate partner causing physical, sexual or psychological harm, including aggression, sexual coercion, psychological abuse, financial abuse and controlling

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behaviours (WHO, 2013). IPA remains a public health and human rights issue in the UK, disproportionately affecting women (ONS, 2020). Appropriate intervention strategies are required to address IPA (Oliver et al., 2019). It is generally accepted that no single factor can explain why some people perpetrate IPA. Recent research has highlighted the importance of individual risk factors (including personality, substance use, mental health and jealousy) in understanding IPA (e.g., McGregor et al., 2016; Hayashi et al., 2016; Lipsky et al., 2010; 2011; Giordano et al., 2010; Gilchrist et al., 2017; Bornstein, 2006). In addition, structural factors, including gender and socioeconomic status, have also been associated with IPA (Capaldi et al., 2012; Corvo & Johnson, 2012; 2013; Okuda et al., 2015).

The relationship between substance use and the perpetration of IPA (SU-related IPA) is contentious. Alcohol intoxication has been used by men to excuse and deny responsibility for IPA perpetration (Radcliffe et al., 2017; Coates & Wade, 2004; Hearn, 2008; Levitt et al., 2008), facilitating 'Jekyll and Hyde' type narratives in which intoxication transforms an idealised 'real self' into a different and aggressive person (Gilchrist et al., 2019). While there is little consensus on causality, studies suggest far higher levels of IPA perpetration among men in treatment for substance use than among the general population (O'Farrell et al., 2004; El-Bassel et al., 2007; Frye et al., 2007; Gilchrist et al., 2015). Four in ten men attending substance use treatment in Southeast England reported being physically or sexually violent towards their (ex-) intimate partner in the previous 12 months, rising to around seven in ten for psychological abuse (Gilchrist et al., 2017). The role of substance use in IPA is not well understood. A recent meta-analysis found that for both men and women, problematic use of all drugs was more strongly associated with IPA perpetration than illicit use alone and whilst there were no significant gender differences based on each drug type for IPA perpetration or victimisation, for both alcohol and drug use, there was a significantly stronger correlation for male substance use and IPA perpetration(Cafferky, Mendez, Jared and Stith's, 2018).

When considering substance use and IPA, for those who are not usually violent, a perceived provocation may be more likely to result in IPA when they are under the influence of substances (Cafferky et al., 2018), whilst others will use physical violence irrespective of substances (Hotlzworth-Munroe, 1994). The strongest correlation between substance use and IPA is reported by perpetrators who also endorse male dominance (Field et al., 2004; Peralta et al., 2010). Substance use can increase both the frequency and severity of IPA (Cafferky et al., 2018; Leonard & Quigley, 2017). The link between IPA and substance use has yet to be fully deciphered (Gilchrist et al., 2019; Radcliffe et al., 2019). A recent analysis of domestic homicide reviews in England (of which 77% were intimate partners) found that nearly half (49%) of domestic homicide perpetrators experienced both drug or alcohol misuse and mental health problems (Chantler et al., 2019).

Recent work has increased our knowledge of the dynamics of substance use in abusive relationships (Gadd et al., 2019; Gilchrist et al., 2019; Crane et al., 2014; Easton & Crane, 2016). However, the route leading to substance use and IPA is still not well understood (Eckhardt et al., 2015). Whilst childhood maltreatment and the witnessing of parental IPA have been associated with IPA and substance use (Tonmyr et al., 2011; Wekerle et al., 2009a; Wekerle et al., 2009b; Wekerle & Wolfe, 2003; Felitti et al., 1998; Rogosch et al., 2010), findings are based on quantitative data and less is known about the dynamic role of such factors that draw on personal experiences in a qualitative manner.

In an effort to recognise perpetrator heterogeneity, perpetrator typologies and extrapolation of groupings of correlates of IPA perpetration have been developed (Holtzworth & Meehan, 2004; Hamel et al., 2015). These typologies tend to split the perpetrators into groups according to a) motivation: instrumental (abuse that is employed as a means to attain a subsidiary goal) or expressive (unplanned acts of anger, rage, or frustration) (Tweed & Dutton, 1998); b) generality and severity of violence and psychopathology (Holtzworth-Munroe & Stuart, 1994; Gilchrist et al., 2003); or c) gender and motivation e.g. controlling, situational or reactive abuse (Johnson, 1995, 2005, 2008). However, these typologies have themselves been criticised for failing to include key characteristics of men who perpetrate IPA; for being overly deterministic and presenting these groups as if they were fully discrete, and for failing to recognise the fluidity of risk and the changing nature of individual patterns of abuse and risk profiles (Gadd & Corr, 2017) (Table 1).

Typology research has failed to address the impact of substance use and trauma, nor incorporate the concepts of equifinality and multifinality. Equifinality recognises that individuals may start in different places but reach the same destination and multifinality suggests that people may experience similar life routes or events, but their outcomes can vary substantially (e.g., Cicchetti & Rogosch, 1996). So, whilst there has been an increased understanding around heterogeneity, we require a more flexible approach to intervention options for perpetrators of IPA (Gilchrist, 2003: Stephens-Lewis et al., 2019), risk and presentation (e.g., Carbone-López et al., 2016; Machisa et al., 2016). One promising approach to understanding routes into behaviours is the 'pathways approach' which aims to address the cognitive, behavioural, affective, and contextual factors that contribute to behaviour and seeks to provide focus for targeting intervention and research (Gannon et al., 2008; Schafer et al., 2004). Pathway models have been a useful framework for understanding the heterogeneity of offending behaviour, with examples from child molestation (Hudson et al., 1999;

Table 1 Example accounts into groupings

Type of Journey	Brief Description of Journey type
Rule Breaking Journey	Overall, childhood exposure to physical abuse and emotional abuse in male dominant households led to a need to have control and power in adulthoods. This need was expressed through rule breaking behaviours such as substance use and antisocial behaviour. A critical finding was that this group discussed IPA incidents in isolation of substance use and discussed general violence to others regardless of gender
Example	Mike witnessed and experienced IPA as a child and thought this was 'normal'. Mike grew up around gangs and began committing crime in his early teens, which coincided with the start of his drug use. Mike met his partner, who had never used drugs, when she was young (15). Mike explained he liked to protect his partner and did not like her talking to other men. Mike explained he would control his partner through his family when he was in prison. He had perpetrated severe violence against her and men he saw as a threat
Entrenched Substance Use Journey	In this grouping, substance use and IPA were highly interlinked. This group experienced early trauma and early onset of substance use which led to an entrenched substance use lifestyle, often portrayed as 'unstable and chaotic'. Men in this grouping used substances as a coping mechanism to help them deal with previous traumas. Abusive behaviours were deemed acceptable to attain drug and relationship related goals. Many of the men's partners were also in a dependant substance use lifestyle
Example	Tim discussed several relationships that had broken down due to his substance use (but no IPA) and disclosed a dependency on heroin and crack. Tim's current partner also uses There has been frequent IPA and regular arguments over housing, money for drugs and withdrawal. He has been physically violent when withdrawing. Tim blames the relationship fragility on their substance use
Relationship Insecurity Journey	Men in this grouping reported later trauma (e.g. bereavement, relationship breakdown), following 'loving' and 'happy' childhoods. Substance use was represented as recreational rather than problematic whilst in their relationships. They had mostly stable lifestyles (e.g. housing, employment, support network) with protective factors in place. But problematic substance use increased when these protective factors were threatened or temporarily absent. Men in this grouping reported incidents of abuse linked to insecurity/sexual jealousy that were heightened when substance use was involved
Example	Thomas reported having a loving and happy childhood. He made friends with the 'wrong crowd' and started to use drugs. Thomas committed an offence and went to prison When he left prison, he was clean for ten years but a bereavement left him feeling insecure. Thomas was married for ten years with no IPA until he lost his job, when it all went 'downhill'. Thomas physically assaulted his partner in front of their children after drinking heavily as he discovered that his partner was having an affair

Ward et al., 1995), rape (Polaschek et al., 2001; Polaschek & Ward, 2002), and homicide (Cassar et al., 2003). As with other types of offending (e.g., firesetting Tyler & Gannon, 2015, identifying pathways to IPA in men who use substances could inform and guide treatment processes and enhance intervention effectiveness (Gannon et al., 2008).

This paper aimed to present a descriptive model of pathways into SU-related IPA perpetration based on thematic analysis of qualitative data.

Method

Design

This secondary analysis uses data from a UK National Institute for Health Research funded programme (RP-PG-1214–20,009) aimed at developing and testing an integrated intervention for men in substance use treatment who perpetrate IPA towards women. Ethical approval for this study was provided by London Stanmore NHS Research Ethics Committee (Reference 17/LO/0395). As part of this research programme, and to prepare for the development of an intervention to be used in substance use treatment services for men receiving treatment for substance use who have perpetrated IPA, qualitative interviews were conducted with 37 men. Men who had perpetrated IPA and 14 of their female current or ex- partners were recruited from substance use treatment services in two regions of England. Participants were interviewed using techniques adapted from the Free Association Narrative Interview (FANI).

Method (Hollway & Jefferson, 2008). This method is highly successful in prompting openness and disclosure in research on sensitive topics. The Free Association Narrative Method follows four key principles: i. asking participants open ended—not closed -questions that invite narrative, ii. active reflection and the use of minimally verbal non-verbal or non-verbal communication to encourage further narration iii. avoiding why questions and iv. following-up using participants' own ordering and phrasing. For the purposes of this manuscript, only the 37 men's transcripts have been analysed.

Data Collection

Interviews were conducted by five experienced female interviewers (AJ, DSL, FD, JH, GG) during May to September

2017. Interviews ranged from around twenty minutes to two hours in duration. Before being qualitatively interviewed, men receiving treatment for substance use were screened by researchers for eligibility (i.e., they had perpetrated IPA towards a current or ex female partner) and basic demographic details were recorded. Men who had not perpetrated IPA were excluded from the qualitative interviews, as were those who had an order preventing them from contacting their partner, or who were not able to communicate in English. Participants were asked for biographical accounts of their substance use and IPA perpetration, referring to men's reports in the screening questionnaire of having perpetrated psychological, physical, sexual, and financial abuse, which were used to form pen portraits for each man (See Gadd et al., 2019; Radcliffe et al., 2019 and Love et al., 2021 for a description of data collection methods). This enabled insight into the frequency, severity, type and stability of IPA perpetration and the role of substance use (i.e., intoxication, acquisition, craving and withdrawal) in this behaviour (Gilchrist et al., 2019). Clear safeguarding protocols were set up for all those impacted by the study, including participants, (ex)partners, family members and researchers. For example, all partners were proactively offered support irrespective of their partner status (in or out of the study); different interviewers interviewed men and women and only information pertinent to risk was ever shared with the professionals supporting the research; all contact was arranged in safe spaces. All data were anonymised, depersonalised and, if needed, altered to mitigate the possibility of being identified in our published work in our published work (Love et al., 2021). All interviews were digitally recorded with the participants' consent and transcribed verbatim using pseudonyms. The dataset was managed using NVivo (QSR International, 1999).

Data Analysis

Analysis of interviews as reported in this article deployed an Inductive Thematic Analysis across the 37 interview transcripts. Analysis proceeded by reading and rereading the transcripts several times to distil the essence of the participants' stories into pen portraits. Inserts from the transcripts were grouped together and coded as sub-themes (i.e., witnessed parental IPA, parental substance use, and sexual abuse). The sub-themes that were conceptually similar formed elementary themes (i.e., household adversity, childhood abuse and low adversity) that made up the overarching themes (e.g., childhood experiences) (Braun & Clarke, 2013). To enhance reliability and rigor, AJ, DSL, JH and PR analysed sections of data independently and compared analyses before moving on to an additional level of abstraction which led to the development of overarching themes. The overarching themes were agreed between authors (AJ and EG). Finally, groups were constructed by arranging the

themes and their sub-themes into chronological order of life events (i.e., childhood, start of substance use, meeting partner) and comparing them against one another for similarities to provide some sense (albeit based on self-report accounts) of potential relationships between substance use and IPA.

The 37 transcripts were divided into two at random. One group was used to develop the themes. Examples of the initial sub-theme would be *parental substance use, witnessing parental IPA and sexual abuse*. These sub-themes were highlighted as key life events and grouped into elementary themes e.g., *household adversity, childhood abuse*. This type of analysis was repeated across the initial data set to highlight pathways into substance use and IPA. The second group of transcripts were then used to test the pathways formed (Fig. 1). The pathways approach identified key points across the life course where events affected all groups; identifying participants with similar experiences but leaving flexibility to reflect individual pathways. The groupings derived from the key points across participants' life course were named to capture this. Where transcripts did not fit the grouping, consideration and discussion led to broadening the description and refining the definition to include all individuals. For example, Chris appeared to have taken a 'Rule Breaking Pathway', breaching social norms by drinking hard early and associating with a deviant peer group. However, when explored further, it became apparent that his entrenched substance use lifestyle and his dyad relationship of substance use underpinned his abusive behaviours.

Summary of Emerging Pathways

Coding and themes were used to create life points and key events in the men's lives (i.e., childhood, adolescence, substance use lifestyle) to see if there were similarities between pathways. Once men were grouped together based on similarities, the pen portraits that were created using men's transcripts were used to confirm similarities and pathways. Discussions were held between researchers when men were missing information, or when a decision could not be made about what pathway the man fitted into.

Results

Sample Characteristics

Male participants ranged in age from 28–52 years. Data were not systematically collected on participants' ethnicities or nationalities. In both regions, however, the ethnic backgrounds of men in treatment broadly reflected the characteristics of men in treatment for substance use in England as a whole (i.e., mainly white British, black and mixed heritage British and white European) (Public Health England, 2018).
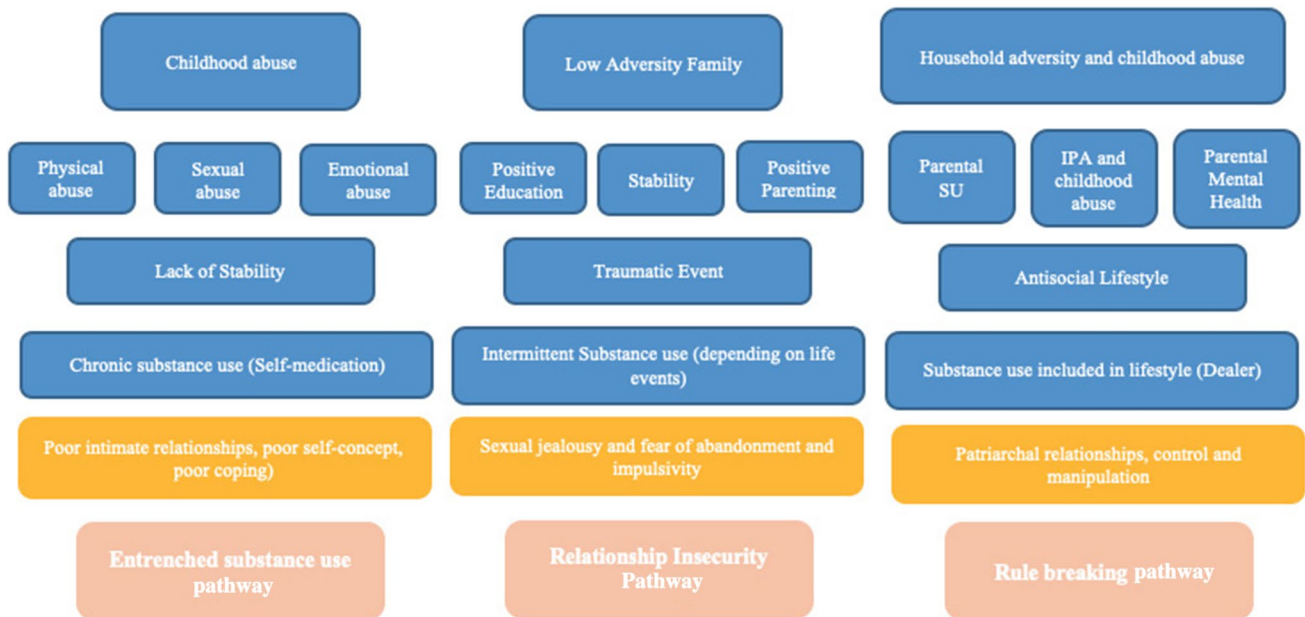
Fig. 1 Key steps in SU related IPA pathways

All male participants had been in intimate relationships for between 1- 26 years. Some of these relationships followed a repeated pattern of engagement and disengagement. All but two men (35/37) were in treatment for heroin use, but had also sought help in relation to their use of crack, alcohol and cannabis. Six men were housed in a hostel or other temporary accommodation.

Although we did not officially confirm self-reports of criminal justice involvement, eight men volunteered that they had been arrested for IPA-related offences and of these, six reported they had received custodial sentences. Within the group, the men described experiencing mental health problems, some of whom had received a formal mental health diagnosis and psychiatric treatment. Two men described having experienced drug-induced psychosis. Three pathways/backgrounds into substance related IPA emerged from the data: 1) Rule Breaking Pathway (*n* = 11); 2) Entrenched Substance Use Pathway (*n* = 13); and 3) Relationship Insecurity Pathway (*n* = 13).

Pathway 1: Rule Breaking Pathway

Childhood exposure to physical abuse and emotional abuse in male dominant households had led to a felt need to have control and power in many of the men's adult lives. This need was expressed through rule breaking behaviours such as substance use and antisocial behaviour. A critical finding within this group of men is that they discussed IPA incidents in isolation of substance use and discussed general violence to others outside of their relationship and regardless of

gender (i.e., general violence to men and women). These findings suggest interventions with men in this grouping might focus on the anti-social cognitions and core beliefs that enable their use of violence, both within their intimate partner relationships and outside of their relationships.

In some instances, men discussed their own experiences of violence as children and made reference to such experiences to explain their perpetration of IPA:

> "[My father] used to hit us a lot… he was very strict… I used to get the belt, smack you with the belt and that and he'd bring all the brothers and sisters down to watch, make them watch, do you know what I mean, teach them… it never worked with me, just made me rebel even worse (Mike)".
> "I never had a good upbringing. My mum and Nan were alcoholic pill poppers and my mum was a prostitute. My dad was a pimp, so I'm a trick. That's like what you call someone whose comes from a pimp and a prostitute. I'm a trick" (Wesley).

Men in this group reported early rule breaking behaviours and engaged in anti-social and offending behaviours from a young age:

> "All jumped out the car and beat him up and I got six months [in prison], came back out, met a new group of friends and got them into drugs. We all got locked up again and by the time I came back out the other group were out … I just kept bouncing from different friends to friends" (Neil)

"I am violent at the football, I was really violent at the football. I bit someone's ear off, I bit someone's nose off. I was a violent person" (Jake)

A small subsection of men within this grouping reported less traumatic events but shared core underpinning cognitive distortions associated with this grouping. These men grew up in households where their father was a dominant, powerful figure and gender roles were unequal. In some cases, this was alluded to but not directly stated, or even recognised, by participants. For example, Matt, whose father was an ex-policeman referred to his father's physical violence "My dad's run upstairs, got his old, wooden truncheon with lead in it, that's what the old ones had in them, came downstairs. I turned like that, and he's just gone boof".

Racism and sexism were also common features of the accounts, with racist generalisations sometimes justifying abuse towards female partners. For example, Wesley discussed clashing cultures when discussing his relationship with his partner who is from Eastern Europe:

"It was a clash of cultures [okay], you know? Er, these people from East Europe, I don't know if they're used to getting badly treated … they kind of er... feel strange when we don't do that [right] but when they get the sweet side of us, they, they don't appreciate it and they, they, they, they sort of disrespect … So we need to be a bit erm... hard to – their
– to respect you because it's their culture [yeah] like that" (Wesley).

Substance use was predominantly early onset in the men's life and linked with antisocial lifestyles. Although some men reported using substances to cope, more reported it was to get a "buzz" which came hand in hand with their offending lifestyle.

"I wanted a buzz, so I started smoking crack" (Jake)

Men in this grouping often reported having perpetrated extreme physical violence towards others, with some having spent time in prison for violent crimes. When speaking about abuse of their partner, men acknowledged their wrong-doing but justified their actions by discussing, as Amir does in this next quote, their 'Jekyll and Hyde' personality to indicate a lack of control:

"Found her hiding in the corner shaking. The terror in her eyes. But I'm the sort of person, that they know this is not me. This is not normal. So fortunately, I get forgiven, often" (Amir)
Matt referred to a 'cycle' in which his partner would hurt him by sleeping with someone else and he would hurt her by perpetrating physical abuse:
"It was a cycle, she'd hurt me then I'd hurt her like a competition" (Matt)

While the men in this group often attempted to excuse their behaviours and blame their substance use, when discussing the specifics of incidents, it appeared that their substance use was not always a necessary condition for violence, and that 'rules' they set and beliefs they had about women as mothers/ partners also influenced their abusive behaviours, as the next two quotes from Neil and Mike illuminate:

"I was screwing [going mad] because Toby [son] hadn't been changed and I went mad at her. We ended up getting in an argument and she [partner] jumped on my back and bit me at the top of my back, taking a big chunk out. I went crazy and flung her around the house. I blacked out and can only remember the police dragging me off" (Neil)
"I liked to control her… throw her in the house, you know what I mean. 'You're not going nowhere', locked the front door so she can't get out the house and I keep her there for days" (Mike)

Instead, there were other core underpinning features related to their perpetration of IPA. In their accounts, there was much evidence of retaliation to provocation, entitlement, power and control, intimidation, male dominance, disrespect of women, sexual jealousy and violence-supportive cognitions. Amir and Dylan, for example, both referred to notional boundaries that their partners could not cross without physical abuse:

"When you're with me these are the red lines" (Amir).
"She's my wife so she should just shut up stop talking and just listen" (Dylan)

Most men in this group said their female partners had a history of victimisation (including childhood abuse and abuse in previous relationships) but were not dependent on drugs and/or alcohol. Some men appeared to target women with trauma and victimisation in their backgrounds, potentially in an attempt to feel they had more power or control over them, subsequently perpetuating the cycle of abuse. However, as Matt and Mike articulate below, they would justify their behaviours as protective:

"Called her a fat cow…it's just stupid petty names, I'm not nasty with it she's got a lot of weight… and she could end up with diabetes… It's all about helping her" (Matt)
"I'm overprotective … mollycoddling because Jenny was sexually abused as a child by a man in her family" (Mike)

Pathway 2: Entrenched Substance Use Pathway

Men in this grouping reported similarly high levels of trauma in their childhoods to group 1 but the trauma was

more of a sexual nature, which manifested differently in adulthood to those men who reported trauma linked with physical violence and general neglect (i.e. pathway 1). In this group, substance use and related IPA were highly interlinked. The pathway into substance use related IPA in this group was early exposure to high levels of specific types of trauma at a young age (i.e. sexual and physical abuse) and early onset of substance use which led to addiction and an entrenched substance use lifestyle, often referred to as 'unstable and chaotic':

> "We were in a drug haze out the pain of losing the baby by taking heroin and being on the run. There was always that underlying thing that we had lost the baby and we were on the run, you know. So, we were constantly looking over our shoulder" (Ben)

As reflected in the quotes from Wayne and Chris below, men in this grouping appeared to have poor coping skills and reported to use substances as a coping mechanism to help them deal with their mental health conditions formed by the previous traumas (e.g., emotional and sexual abuse) endured:

> "I will not stop weed as it calms me down ... I'm a horrible person without it and normal with it" (Wayne)
> "I was using everyday as the medication they [referring to GP prescribing for his 'split personality'] wasn't working and I don't like the person I am when I haven't been smoking" (Chris)

Abusive behaviours were deemed acceptable by these participants to attain drug and relationship related goals. Men in this grouping generally presented with poor coping skills, mental health conditions and most struggled with life in general:

> "I don't want to give up my puff because, I need it 'cause I get so stressed in life. If I don't have a spliff, life is hard" (Joe)

It was clear from men's accounts that substance use helped them cope with, and/or self-medicate mental health conditions and negative emotions associated with the trauma experienced in their childhood:

> "I was sexually abused for three years by a family friend but I kept it to myself that's why I've got PTSD and started to use drugs to forget and escape but it only masked it it's not going away" (Jack).

This group did not report engaging in anti-social or criminal lifestyles before their dependency on drugs or alcohol. Instead, as Rory and Trevor explain, men suggested that their reliance on substances to medicate their previous traumas often led them into an entrenched substance use lifestyle where they became reliant on crime and/or their partners to source drugs:

> "We would go out grafting together, pinching credit cards and things like that to fund our habit … 15 years of in and out of jail for pinching and that" (Trevor)
> "The harder the drugs you do the more serious crimes you'll do because you want it so much" (Rory)

Many were in co-dependent substance using relationships, characterised by chaotic cycles in relation to craving, withdrawal, and acquisition of substances. Men in this group described arguments escalating when craving, intoxicated, and/or withdrawing from substances, leading to impulsive acts of IPA, particularly when certain substances (cocaine, alcohol and heroin) were involved:

> "I asked her to go pick up (drugs) for me and she refused and it escalated yeah, and then I must have slapped her face in the eye or whatever and then I punched her" (Tim) "Certain drinks send me nuts and when I am drinking if we're fighting, you're damn right I'll punch her in the head" (Rory).

While substance use was perceived by the men in this group to intensify disputes with their partners, many considered their substance use and abusive behaviours to be linked to their previous traumas and their current mental health issues. Men's mental health diagnoses sometimes were used to justify and contextualise their IPA perpetration:

> "I struggle with having a relationship because of my emotionally unstable personality disorder" (Richard)
> "Smashed the house up loads of times when I don't smoke [drugs]; I don't know what I am doing" (Chris)

Men's accounts of their partners suggested that they had also experienced traumatic and chaotic pathways into drug use and relationships and had either previously been dependent or were presently also dependent on substances:

> "Our relationship was good to begin with until she started drinking and violence' occurred on both sides. Tina [partner] has always liked a drink but she started drinking every day and becoming a very nasty alcoholic" (Chris).

Although many of the men disclosed introducing their partners to drugs, a core theme across narratives was 'to protect'. In this group, men discussed employing or exercising control tactics under the banner (or pretense) of protection:

> "On a couple of occasions… I said you're not going nowhere [to smoke drugs], so I used to just lock her in the room. When she calms down she is glad… because 'you saved me from going to start smoking" (Tim).

Further, the sex work reported being undertaken by female partners, to pay for some couple's drug use, appeared to compound gendered inequalities and increased the risks of harm within these relationships. This led to heightened sexual jealousy that exculpated controlling and physically abusive behaviour as Joe articulates:

> "It was just like, well, if you can do that behind my back – and keep that from me – then now you can go and do it for me. If you won't do it for me, don't come back". (Liam) "She ain't a slag but she acts like a slag, when you lead on a bloke, for drugs, and for money … I am a jealous bloke" (Joe)

Most men in this group discussed previous relationships and insisted that although their substance use had an impact on their behaviours, they would not deem themselves to be abusive. A majority of men in this grouping acknowledged that substance use was a risk factor in their physical violence but also placed blame on their substance using co-dependent partner. Men in pathway 2 differed from those in pathway 1 in that, whilst they minimised and justified abuse, they disclosed feelings of shame and remorse and did report strategies to reduce risk:

> "I would just leave because the arguments are going to just lead into like a fight or something like that" (Tim) "I suggested we get our own places after rehab, so I go back there now if I know it is going to kick off… I don't want to hit her" (Chris)

Men in this grouping may require intervention based around their mental health and previous traumas before tackling their substance use lifestyle and IPA, particularly given that most of them discussed their substance use as a way of coping with their histories. Many of their partners were also in a dependent substance use lifestyle.

Pathway 3: Relationship Insecurity Pathway

In this group, men reported being in long-term relationships and appeared to lead 'stable' lifestyles with employment, housing, and support networks. Such protective factors appeared to be key when considering the men's substance use. The pathway into substance use related IPA in this group was often driven by intoxication and discussed alongside sexual jealousy and insecurities. Substance use was discussed as recreational and not dependent during the time of their relationships:

> "On a night out we'd probably you know both like a bit of coke and stuff for the buzz" (Nick) "I was accommodated and started doing recreational drugs and cocaine and lived down that line" (Lenny)

Such relationships with substances enabled the men to continue to have stable lifestyles (e.g., housing, employment, support network) and protective factors in place. However, problematic substance use was likely when these protective factors were threatened or were temporarily absent, which may also have increased the risk of impulsive IPA:

> "My marriage started going downhill and I turned to drink which caused loads of problems" (Thomas) "I lost my job which caused arguments and I started to drink heavy because I was bored" (Rob)

Men in this grouping reported incidents of insecurity and/or sexual jealousy that were heightened when substance use was involved, subsequently lowering the threshold for IPA to occur:

> "[Referring to an incident where he walked in on his partner with another man in the bedroom] I don't hit women, but it was just, I was absolutely riled with everything. I was actually… on my edge myself … if it wasn't for the drink, it wouldn't happen" (Francis) "I just told her to not go and see this particular guy because I don't like him. So, I didn't like him so I didn't want to see him… alcohol lowers your inhibitions" (Colin)

Men did not discuss incidents of IPA in isolation of substance use and no clear patterns of abusive behaviours emerged (i.e., IPA incidents were discussed as isolated events) within this pathway, which was evident in pathways 1 and 2.

Unlike group 1 and 2, men in this grouping reported low levels of trauma in their childhoods and reported their onset of substance use during their adolescents:

> "My childhood was brilliant and perfect" (Thomas) "I had a normal and happy childhood" (Scott)As the quotes below from Thomas and Rob elucidate, many of the participants in this group discussed the role of deviant peers and naivety leading to their use of opioids and crack cocaine: "I got in the wrong crowd and never thought I was going to get addicted but the next thing I knew I was addicted" (Scott) "Due to peer pressure at [age] 14 15, I started to smoke cannabis and then it just progressed from there … smoking too much cannabis wasn't having an effect so I upped it to smoking heroin" (Thomas)

Their (heightened) use of substances usually coincided with an adverse life event, such as losing their job, a marriage breakdown or a bereavement:

"I couldn't find work; money wasn't coming in and that caused problems. I started drinking early in the morning, wake up and have a drink straightaway" (Rob)

"I'd be awake all day, work all night and then couldn't sleep. I started drinking four cans or something, just to get me asleep, then I went on to the rum, the vodka, it went to a day- to-day thing" (Lucas).

Men in this grouping reported that there had been no issues in their relationships prior to their substance use and that their previous relationships had been long term (10 + years). Their IPA could have been classified as impulsive intoxicated IPA. The IPA described was also usually physical in nature. Some men reported that this was their first instance of IPA in long term relationships. However, the majority of men in this group also reported that sexual jealousy, considered to be linked with fear of abandonment, often underpinned their violent episode, which is why this grouping are termed insecurity + substance use fueled abuse. For example, Thomas described violence apparently driven by intoxication after having found out his wife had been having an affair:

"I had drunk I don't know how many cans of strong lager and cider that day but unfortunately when I found out [about the affair] I erupted … slapped her and then I punched her in the back of the head three or four times" (Thomas).

Similarly, Dave and Lenny described violence instigated by jealousy if they had been drinking:

"If I have had a drink and he [his partner's ex-boy-friend] texts her, I fly off the handle and I start punching doors" (Dave).

"[referring to his when he has been drinking] You were looking at that guy in the club; I saw you were talking and you were very touch, touch. I don't like it" (Lenny)

Unlike the other pathways, alcohol was present in many of the men's accounts. Work with men who may fall within this pathway might address emotional and attachment insecurity.

Discussion

Incorporating the concepts of multifinality and equifinality, (Cicchetti & Rogosch, 1996) this paper explored the range of backgrounds and routes that lead to the same outcome of substance use related IPA, but with different manifestations and different underpinning features. For example, we identified abuse in the backgrounds of men in both pathway 1 and 2, and whilst there was more physical and emotional abuse in pathway 1, and more sexual abuse in pathway 2, it

was clear that different subsequent experiences and adaptation could result in antisocial behaviours presenting as the central problem or substance misuse presenting as a more central feature. The later trauma in pathway 3, which destabilised an initially positive trajectory, is also evidence of this differentiation.

When considering the separate grouping of pathways, men in the rule breaking pathway, pathway 1, disclosed high levels of early physical trauma, antisocial behaviour, a criminal lifestyle and misogynistic attitudes. Violence was often presented as impulsive, justified and blamed on partners, with IPA occurring both with and without substance use. Men in this grouping would likely be abusive regardless of their substance use, but with substance use intensifying when their relationships ended, and they had 'lost control'.

Men within the entrenched substance use pathway, pathway 2, had experienced significant levels of trauma in their background, particularly sexual abuse and humiliating and degrading experiences. In comparison to the experience of physical abuse, as seen in pathway 1, experiencing sexual abuse has been linked to a higher likelihood of the heaviest substance use and more personality disorder (Fitzpatrick et al., 2010; Reckdenwald et al., 2013). It is in line with literature suggesting that substance use is a means of coping with challenging life events and associated negative emotional states, with early mental health issues or illness related to trying to cope with these experiences (Cafferky et al., 2018).

Men in the entrenched substance use pathway, pathway 2, were often in co-substance using relationships and were 'trapped' in a lifestyle of substance use. This finding is consistent with dyad groupings which highlighted the different patterns seen in couples with concordant or discordant substance use (Gadd et al., 2019) and with literature highlighting exposure to ACEs being linked with later drug use and other negative outcomes, such as offending, imprisonment and mental health issues (Negriff, 2020; Wolff & Baglivio, 2017). Men's physical perpetration of abuse was often discussed alongside the physical symptoms of withdrawal and explained with reference to this context. However, what was more prominent was the emotional and financial abuse that was present (i.e., encouraging partners to sex work and taking money for their own use).

Those in the relationship insecurity pathway, pathway 3, often reported experiencing an adverse event in late adolescence/adulthood that had increased their insecurities and had led to a lack of trust in people. These pivotal experiences appeared to play significant roles in the men's lifestyle choices and their outlook on intimate relationships (i.e., previous infidelity, adult bereavement). Men in this grouping reported increased use of recreational substances following breakdown of intimate relationships; abuse was reported to stem from underlying insecurities that were exacerbated

when intoxicated, which typically then led to impulsive physical acts of abuse. Men in this grouping reported 'one off' incidents of IPA, that was not as frequent in their relationships and there was not such a clear pattern as in the other pathways discussed.

Our groupings of pathways share some similarities with other typologies of IPV. For example, the rule-breaking pathway (pathway 1) grouping resonates with Johnson's (2008) intimate terrorist model and Holtzworth-Munroe and Stuart's (1994) 'generally violent/antisocial batterer' typology. The relationship insecurity pathway (pathway 3) grouping resonates with Holtzworth-Munroe and Stuart's (1994) 'family only batterer' typology and resembles Johnson's (2008) situational couple violence typology. These similarities offer some support for our findings of different pathways. However, a key difference is that we present these groupings as overlapping – as opposed to discrete—constructs where individuals may present with features of more than one group or move between groups as adverse life events impact upon them. Hence, some individuals may start in different places (i.e., childhood experiences, dependency/ addiction/ entrenched substance use lifestyle) but social contingencies may lead to similar outcomes to others who began their pathway elsewhere. Others may start from the same point but their exposure to positive and negative life experiences can alter their trajectory. This enhances understanding around the heterogeneous treatment needs across these men and helps to formulate what may be at the root of the different presentations of IPA.

The grouping of pathways identified in this article resonate with earlier research highlighting the impact of developmental experiences on later life (Davies & Biddle, 2018; Finkelhor et al., 2007), specifically around how men perceive the world and how they form relationships within it. This is particularly true for those who have disclosed childhood abuse, which has led to coping mechanisms that seek to regain control over their lives (Øverup et al., 2015).

In relation to shared experiences, many men highlighted a traumatic event in their background as a pivotal moment. Their actions after these events led them down particular routes, in which they sometimes constructed themselves as either having little choice but to use violence or being out of control. This echoes previous research, which has shown that substance use is more intricate than the physiological effects of alcohol or intoxication alone (Georgsdottir et al., 2021; Gilchrist et al., 2019). The men felt that different substances (i.e., alcohol and drugs) impacted them in specific ways, and molded their abusive behaviours accordingly. However, despite shared experiences there were important differences, particularly as to how substance use and IPA interacted within these men's relationships. We identified three pathways into substance use-related IPA that could help inform perpetrator interventions, particularly by focusing on

experiences related to risk, which if removed, or mitigated by the provision of protective factors, could alter men's trajectories and, in line with the concept of multifinality, lead to more positive outcomes, despite poor early experiences.

In this context, pathways 1 and 2 have highlighted that despite having experienced similar backgrounds, a number of divergent routes can lead into substance use and IPA behaviours that may serve different functions (Fig. 1). Further, the variation in backgrounds of the men in this study highlighted that despite different starting points, men can arrive at the same outcome (i.e., problematic substance use and perpetration of IPA). This paper described dominant traits of groupings but recognises the dynamic nature of risk and need. The benefit of identifying dominant themes is that it increases understanding of risk and need, provides points to promote protective factors and informs effective intervention.

Treatment Needs

Based on the research reported here, we tentatively offer the following suggestions regarding intervention. Further research is required to test these assumptions. Men in the rule -breaking pathway (pathway 1) may require the most intensive intervention. Abusive backgrounds appeared to be at the root of this type of substance use related IPA. Exposure to trauma has arguably been linked with heightened hostility perceptions and heightened risk-taking behaviours (linked with substances and offending) due to stress-induced changes in neurobiology (Dube et al., 2003). This appears to have led to the development of negative views of women; coping via hostility and aggression; high male entitlement and low empathy particularly for those who allow themselves to be victims and vulnerability in general. Removing substance use would not be sufficient to addressing IPA. Re-scripting childhood experiences that led to unhelpful schema, enhancing distress tolerance and self-regulation and re-framing automatic cognitions linked to need for control, violence, male and entitlement towards women are key to intervening effectively with this type of substance use IPA perpetration.

Reflecting the literature connecting exposure to early adversity with disrupted connection-seeking attachments (Smith et al., 2016), men in the entrenched substance use grouping had trauma and emotional dysregulation at the root of both their substance use and IPA perpetration. Substance use and IPA were entrenched and reflected ingrained and unsustainable avoidant coping. For men in this grouping, a focused intervention is likely to be required to address the root of their levels of ability to regulate emotions (i.e., the trauma they have experienced) and their use of substances to cope. The need for sexual ownership was commonly connected to a fear of abandonment, which presented as the root

of many of the abusive incidents. This was further complicated by the associated challenges between substance use, co-dependency and mental health issues.

In the relationship insecurity pathway, the drivers of IPA were more situational in nature. Men in this grouping reported long term relationships without abuse, prior to the adverse life event and reliance on substance use. From the men's accounts, it would appear that removal of substance use behaviour, increasing coping skills and promotion of general protective factors such as employment, would be likely to lower the risk of IPA. The men in this group may require a less intensive and more focused intervention than the other groupings. However, it is important to again highlight that only men's perspectives of the relationships were analysed.

Limitations

As this manuscript focuses solely on the accounts of the men, whilst helpful in understanding how to engage them in interventions, the interpretations cannot and do not reflect the victim's realities. We now from the comparative analyses that we have conducted with a subsample of this cohort that many of their partners and ex-partners understood and accounted for the violence differently. Given substance using dyads were common in the second grouping, there is a need to link this analysis with the groupings identified by Gadd et al. (2019) to further unpick the nature and development of substance related IPA in co-dependent relationships. There may be a benefit of offering a range of treatment options in these relationships.

A variety of individual pathways into substance related IPA perpetration exist. Our groupings are not discrete and should not be used as a means of representing or classifying men. While some men who use substances and perpetrate IPA may align to a greater extent with one of the groupings, there are important individual differences between perpetrators; each man has a distinct pathway, and there are often unique interactions between the presence and absence of traumatic events and of 'protective factors' that are often lost under large groupings. The proposed pathways should nevertheless help to guide intervention and therefore have important practical implications.

Future steps and Practical Implications

Future research should seek to test the empirical validity of the hypothesised pathways and groupings outlined in this paper. This could include further research with dyads. These findings highlight the need for integrated interventions and underline the importance of the current ADVANCE programme. ADVANCE targets low-medium risk perpetrators, working with those argued to fall into the entrenched substance use pathway and some in the relationship insecurity

pathway (Dheensa et al., 2021; Gilchrist et al., 2021b). The programme draws on elements of cognitive behavioural therapy, dialectical behavioural therapy and behavioural approaches to address behaviour, cognition and emotion elements of substance use related IPA (Gilchrist et al., 2021a, b). Future ADVANCE programmes may be adapted to address one aspect in more depth (behaviour, cognition, emotion) in response to the needs of the groupings proposed.

Conclusion

This manuscript shows why a pathways approach is helpful in addressing heterogeneity in substance use related IPA, particularly when exploring treatment and risk assessment options. Whilst rigid categorisations of men into sub-groups of perpetrators are hard to substantiate due to overlap across groups, the pathways approach offers more flexible conceptualization of diversity. This is because it a) incorporates equifinality and multifinality in individual pathways b) allows a dynamic conceptualisation of the pathways into IPA and c) reflects the complex interplay between substance use and abuse. Further research to refine this approach is warranted. However, the model appears helpful in formulating individual risk and needs with reference to the challenges in data elicited from IPV perpetrators.

Declarations

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