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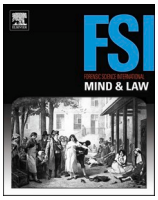

'*I inevitably get in trouble … in one way or another*': Qualitative exploration of the vulnerabilities and experiences of justice system encountered individuals with fetal alcohol spectrum disorder

David J. Gilbert [a,*], Clare S. Allely [a], Nicola Hickman [a], Raja A.S. Mukherjee [a,b], Penny A. Cook [a]

[a] School of Health and Society, University of Salford, Manchester, UK
[b] FASD Specialist Behaviour Clinic, Surrey, and Borders Partnership NHS Foundation, Trust, Redhill, Surrey, UK

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ABSTRACT

Background: In comparison to the neurotypical population, individuals with fetal alcohol spectrum disorders (FASD) are over-represented in the criminal justice system (CJS). This study explores the perspectives of a small sample of individuals with FASD regarding the factors that predispose them to encounters with the CJS, and their experiences during investigative interviews.

Methods: Semi-structured interviews were conducted with ten individuals with FASD, aged between 12 and 46 years old (mean age 20.1 years). Interviews were a combination of remote audio-recorded, video-recorded, and face-to-face interviews administered by parents/carers. NVivo was used to collate, organise, and explore data. Data were analysed by reflexive thematic analysis.

Results: Three over-arching themes were generated from seven sub-themes: "personality/individual triggers to CJS encounters" which described vulnerabilities, such as a tendency to be impulsive and to accept suggestions, "encounters 'fuelled' by society" where examples of exploitation, police's aggressive approach and lack of knowledge were given. The final theme of "sense of self-awareness" demonstrated that participants had a sense of appreciation of their strengths and abilities.

Conclusion: Individuals with FASD are highly vulnerable to, and within, encounters with the CJS. Procedural justice will benefit by employing alternative methods in dealing with situations where individuals with FASD may be involved, and in obtaining information via interviews from the FASD population.

1. Introduction

Exposure to alcohol during pregnancy can result in preterm delivery and delayed development alongside other secondary outcomes such as disengagement from school, alcohol misuse, mental ill-health, and encounters with the criminal justice system (Nykjaer et al., 2014; Popova et al., 2016; Streissguth et al., 1996). Fetal alcohol spectrum disorders (FASD) is acknowledged as one consequence of prenatal alcohol exposure and described as an umbrella term for four closely related conditions – fetal alcohol syndrome (FAS), alcohol related neurodevelopmental disorders (ARND), alcohol related brain damage (ARBD) and partial fetal alcohol syndrome (pFAS) (Hoyme et al., 2016). FASD is used as a diagnostic term in the Scottish Intercollegiate Guidelines Network (SIGN 156) guidance adopted by the UK (SIGN, 2019).

The estimated global prevalence of FASD amongst youth is 7 per 1000 (95% CI) with higher prevalence in the European region (19.8 per 1000; 95%CI), and the most affected European countries being Croatia (53.3 per 1000 population) and Ireland (47.5 per 1000 population). Recently, attempts have been made to estimate the prevalence of FASD in the UK. For example, McQuire and colleagues (2018) using a birth cohort study, published screening estimates of 0.6, 0.7, and 1.7 (per 1000 population) for singly imputed, complete case, and multiply imputed data analyses respectively. Within the Greater Manchester area, a recent active case ascertainment study (McCarthy et al., 2021) carried out in 3 mainstream primary schools found the prevalence rate of FASD to be 1.8% (95% CI: 1.0%, 3.4%).

FASD has a higher prevalence within certain subpopulations

* Corresponding author. University of Salford, School of Health and Society, Mary Seacole Building, Broad St, Frederick Road Campus, Salford, M6 6PU, Manchester, UK.
E-mail address: d.j.gilbert1@salford.ac.uk (D.J. Gilbert).

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including those in the care system, Aboriginal communities, those receiving special education, and correctional populations (Lange et al., 2017; Popova et al., 2019). Within the correctional population, a systematic review of the few available studies (mostly originating from North America), suggests that young people with FASD are 19 times more likely to encounter the Criminal Justice System (CJS) than neurotypical individuals of the same age (Popova et al., 2011). In a recent Canadian study for example, the prevalence rate in a correctional setting using a case ascertainment approach was estimated to be 17.5% (McLachlan et al., 2019). An Australian study published a 36% prevalence rate in a detention centre, with the majority of FASD diagnoses in those from an Aboriginal population (Bower et al., 2018). Prevalence of FASD within the CJS setting in many countries is not yet available; however, it is envisaged that the prevalence would be significantly higher than the neurotypical population, especially in settings where alcohol is socially accepted.

Despite the potential for CJS encounters in individuals with FASD, as evidenced in the few available prevalence studies, few studies have published the voices of individuals with FASD concerning the factors that predispose them to CJS encounters and their experiences in the system (Currie et al., 2016; Pei et al., 2016; Tait et al., 2017). Currie et al. (2016) in a Canadian study explored the factors associated with positive outcomes during contact with the CJS in adults with FASD. Their findings reveal the positive impact of an early diagnosis alongside low substance abuse. In another Canadian study (Pei et al., 2016), the experiences of nine adults with FASD within the CJS were explored and the themes identified were 'primed to enter the system', 'hindered within the system' and 'strengthened to move beyond the system'. The lived experience of two individuals (61 and 66 years old) with FASD were the subject of a case study by Tait and colleagues' (2017); the findings highlight the need for coordinated support and positive social networks for individuals after incarceration in the justice system. An paper from Australia explored the experience of justice-involved youths, although with respect to their experiences in an FASD assessment (Hamilton et al., 2020). The findings highlight the challenges in obtaining verbal data from individuals with FASD. A recent systematic review also highlights the dearth in research regarding the dearth of research regarding the experiences of individuals with FASD during investigative interviews (Gilbert et al., 2022).

The current research article presents an addition to the globally sparse literature on the voices of justice-involved individuals with FASD. The study, which is the first to include the experiences of people with FASD regarding CJS encounters/investigative interviewing experience in the United Kingdom (UK), presents the perspectives of individuals with FASD across different age spectra, from preteens to teenagers and adults, who have been in contact with the CJS. Our aim was to explore the perspectives of individuals with FASD regarding the factors that predispose them to encounters with the CJS and their experiences during investigative interviews.

2. Method

This study employed a qualitative research design to explore experiences. The research questions were: *"what are the perceptions of individuals with FASD regarding the factors that predispose them to encounters with the CJS as suspects of crimes?"* and *"what are the experiences of individuals that led to encounters with the CJS as suspects of crimes and the experiences within the CJS during investigative interviews?"*.

2.1. Recruitment strategy

Participants were recruited by purposeful sampling (Bowling, 2014) as part of a wider qualitative study which also explored the experiences of parents of individuals with FASD; the findings from the parents' experiences are the subject of a separate publication (Gilbert et al., under peer review). Twelve parents of individuals with FASD recruited for the wider study were requested to advertise this study to their children with a diagnosis of FASD. Not all children of participating parents agreed/were available to participate; hence, a snowballing approach was also employed to identify and recruit other suitable participants. Social media channels such as Twitter and Facebook were used to create awareness about the study (Hamilton & Bowers, 2006); the study's recruitment flyers were posted and interested adult participants/parents of participants contacted the researcher. After the first contact to register participants' interest, the researcher emailed the research information sheet and consent forms to the participants. Interview times and dates were agreed upon once consent/assent was obtained from participating participants. For the participants who were children, a child-centred approach to seeking assent was employed because the research participants are a vulnerable population (Clark, 2011). Consent forms were used for participants that were at/over the legal age for consent (18 years old), while the assent forms were passed on to parents of participants below the age of consent. The parents then passed on information/assent forms about this study to their children and those interested in participating offered their assent.

2.2. Sample description

Ten individuals (two preteens, five teenagers, and three adults) with FASD were interviewed. Participants comprised nine males and one female with a mean age of 20.1 years and age range of 12–46 years). Eight of the interviewed participants were from different locations across the UK; one participant was from the United States (US), and another was from New Zealand. Inclusion criteria for the study included an FASD diagnosis and previous encounter with the CJS. See Table 1 for participant description; all participants' names have been pseudonymised.

2.3. Data collection

Remote audio-recorded semi-structured interviews were conducted by DJG and NH. Video conferencing platforms were employed for the interviews (Saarijärvi & Bratt, 2021; Salmons, 2009). Microsoft Teams was the preferred platform, but Zoom was used when one participant could not connect to Microsoft Teams. With respect to positionality during data collection, the researcher considers himself as an outsider researcher and identifies as a young (early 30s), multilingual, non-disabled, heterosexual, married male of African ancestry. Due to the multicultural setting of the first author's formative years, this significantly influenced the adoption of a pragmatic lens to research. With regards to the current article, the pragmatic approach afforded an opportunity to employ a constructivist lens to the research design, due to the nature of the research question.

The average duration of the interviews was 20 min, 50 s. Parents/carers of young individuals with FASD assisted their children set up the interview platform and a few (four) parents provided additional context to scenarios when the young person did not provide details. The adults with FASD who took part needed no external assistance and independently participated in the interviews. Also, the pictures of the researchers were sent in advance to a participant who wanted to know what the researchers looked like; this was to assist the young person develop the confidence to attend the interview. Two participants were in residential care while one was incarcerated at the time of data collection; therefore, permission was sought from the ethics panel for parents/carers to administer interviews on behalf of the researcher. Simplified versions of the interview guide were emailed to the parents of these individuals (Hamilton & Bowers, 2006), who then administered the questions and wrote down the responses of their children. Responses from these were emailed to the researcher by the parent/carer.

Participants in this study were vulnerable; hence, parents were permitted to sit alongside their child during audio interviews to provide support where needed. This is coherent with the wider literature which advocates for 'adaptability' to obtain information from participants with

Table 1
Description of participants/interview duration.

S/N	Participant's pseudonym and country	Gender	Interview mode	Narrative	Length of interview
1	Oliver, UK based participant	Male	Microsoft Teams	12-year-old diagnosed with FASD; has been involved with the CJS. Participant's mother sat beside him during the interview to provide support.	11:32
2	Rachel, US based participant	Female	Zoom interview	46-year-old, based in the US and has encountered the CJS. Participant was alone and needed no form of support during the remote interview.	27:02
3	Tom, New Zealand based participant	Male	Email interview	17-year-old and has had several encounters with the CJS. Parent administered the interview, wrote down the responses and emailed the responses to the researcher.	N/A
4	Josh, UK based participant	Male	Microsoft Teams	12 years old with FASD and has encountered the CJS. Participant's mother sat beside the participant to provide support during the interview.	40:54
5	Finn, UK based participant	Male	Microsoft Teams	14-year-old with several CJS encounters. Participant's mother sat beside him during the interview, but the participant prematurely terminated his interview by walking away.	04:23
6	Ellis, UK based participant	Male	Email interview	13-year-old who has encountered the CJS several times. Interview was administered by mother and responses emailed to the researcher by mother. Participant's sibling (Cox) was also part of the current research as a participant.	N/A
7	Cox, UK based participant	Male	Email interview	13 years old who has had several CJS interrogations. Interview was administered by mother and responses emailed to the researcher by mother. Participant's sibling (Ellis) was also part of the current research as a participant.	N/A
8	Russell, UK based participant	Male	Microsoft Teams	20-year-old, diagnosed with FASD who has had several CJS encounters. Participant's father was present during the interview to provide support which was minimal throughout the interview.	24:56
9	Ryan, UK based participant	Male	Phone interview	37 years old with several encounters with the CJS. No parent sat beside the participant as participant did not need any support during interviews.	20:57
10	Matt, UK based participant	Male	Microsoft Teams	17-year-old with several encounters with the CJS. Participant's mother was present during interviewing to provide any needed support.	16:10

cognitive impairments (Teachman & Gibson, 2013). Four parents sat beside their children; parents occasionally interjected to clarify their child's statements or provide in-depth insight into the story provided by their child (ren). The need for this was likely to be due to the memory problems or lack of expressive language ability evidenced in individuals with FASD (Kippin et al., 2018; Wyper & Rasmussen, 2011). During the interviews, DJG and NH were guided by the interview guide which was developed and informed by the aim/objectives of the study and a systematic search of the literature. Sample interview questions included: "*Can you remember (and tell us) what happened when the police were asking you questions?*" or "*Can you remember (and tell us) any time when your friend asked you to do anything wrong and you did it immediately without thinking about it?*" One participant prematurely terminated his interview by walking away.

2.4. Data analyses

Using a critical realist approach, reflexive thematic analysis was employed to analyse collected data in alignment with the method described by Braun and Clarke (2006; 2021). Reflexive thematic analysis provides a theoretically flexible approach for the inductive/deductive data analysis of participants' experiences, whilst capturing the semantic and latent meanings from participants' quotes. A critical realist approach offered the authors a chance to interrogate data to identify meanings/patterns within the dataset. Data analyses commenced with the transcription of audio-recorded interviews followed by familiarisation, coding, generation of initial themes, refining, defining and naming themes; and finally, writing up.

The data analysis process was not linear (but recursive) as the first author's conceptualisation of codes and themes continually evolved until the final manuscript was produced. For transcription, online transcription software was employed (online MS-word, Rev, and HappyScribe). Transcription was not required for interviews administered

by parents/carers because the participants' responses were emailed to the researcher in a written format already. In preparation for the next stage of data analysis – coding, transcripts were edited and proofread orthographically while noting breaks and pauses; breaks are represented by […], while pauses are presented as [pause].

An inductive, data-driven approach to coding was employed which offered the authors the flexibility of identifying themes that were unanticipated. Semantic and latent codes were used with no attempt to prioritise either coding approaches; semantic codes identified 'explicit' meanings from participants' quotes and were the first form of codes employed, while latent codes identified the underlying meanings from participants' quotes. All similar codes were grouped into sub-themes; related sub-themes were grouped, and overarching themes were generated. The generation of themes was based on the identification of recurring patterns of information across transcripts and themes represented the central organising concept (Braun & Clarke, 2006, 2021). Coding, sub-themes, and themes development were undertaken by two independent coders – DJG and NH, who met to compare and clarify codes at the coding stage. The authors acknowledge that the use of two independent coders deviates from the standard reflexive thematic analysis procedure prescribed by Braun and Clarke (2006; 2021); however, the purpose of the additional independent coder was not to ensure 'code correctness' or inter-coder reliability, but to clarify codes from multiple perspectives and for the exploration of multiple assumptions to gain 'richer' insights about the data.

3. Ethics

Ethical approval for this study was obtained from the University of Salford research ethics panel (reference: 1366) on the April 09, 2021. An ethics amendment was received on the August 12, 2021.

4. Findings

Three overarching themes and seven sub-themes were identified. See Fig. 1 for thematic map:

1. Personality/individual triggers to CJS encounters

This overarching theme describes factors that were based on the individual characteristics of the individual with FASD and led to encounters with the CJS, as narrated by participants. Three sub-themes were identified under this theme, impulsivity, behavioural issues, and susceptibility to suggestions.

I) Impulsivity: ***"I just take things; I don't think about it."***

Participants across the conducted interviews relay impulsivity as a factor that led them to encounters with the CJS. For example, Oliver mentions that he 'just takes things' and does not 'think about it.' It is only when he's 'got in trouble' that he begins to understand:

"It just happens, I don't think about things … I just take things … I don't think about it, about the consequences, and then once it's happened and I've got in trouble, then I start to understand."

(Oliver, male aged 12 years old)

Oliver's quote above projects the notion that, rather than being a single act, it is a 'habitual' pattern to 'just take things' without thinking about the consequences. 'Just take things' in this context may be easily understood as either stealing or coveting other people's properties. Reflecting on circumstances that led to encounters with the CJS, Rachel describes the influence of impulsivity and compulsive behaviour:

"I did have a lot of like impulsive actions and I had a lot of compulsivity. I was compulsive and impulsive with a lot of my action from the time I can remember".

(Rachel, female aged 46 years old)

Russell describes how many times he would act without considering the consequences of his actions. He goes on to describe his thoughts as 'spur-of-the-moment' thoughts, using an expletive for emphasis:

"Yeah, I, I think, I, I think on the spur-of-the-moment, so I don't actually think about the reactions after. So, I'm more like kind of like you know, right? 'fuck it! I'll do it and then I'll see what comes out of

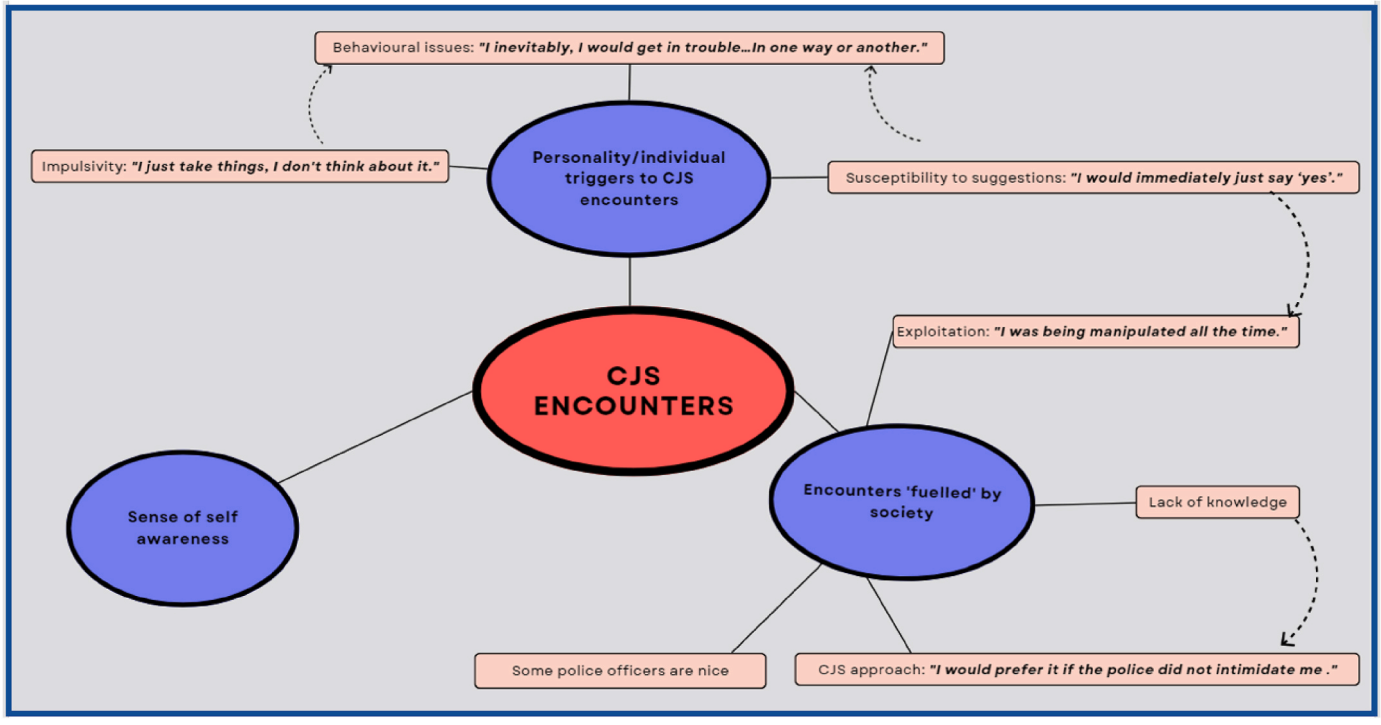

Fig. 1. Figure showing overarching themes
*Dotted arrows show relationships between subthemes.

it.' You know what I mean? There and then, I think about it after it has happened you know what I mean?

(Russell, male aged 20 years old)

i) Behavioural issues: ***"I inevitably I would get in trouble … In one way or another."***

Across transcripts, participants describe how they consistently got into trouble with the law due to behavioural issues ranging from theft to other 'misdemeanours.' Oliver below narrates an incidence of theft where he stole from a shop and was referred to the police intervention team:

"I stole something from a charity football club. I got into trouble and then, I didn't get arrested but started working with the youth justice team and I go and meet with the police intervention team."

(Oliver, male aged 12 years old)

Other behavioural issues highlighted by another participant (Ryan) is aggression which led him to, for example, threaten staff at a mental health service. Further to this, Ryan describes how, although he has obtained his driver's license, it is under an annual review; he is able to manoeuvre a car sufficiently well but knows his temper could potentially get him in trouble. Ryan's quote below also reflects some level of self-awareness:

"But then when, when I sit and think like the other day, I got arrested at the mental health services because I was threatening the staff at that time [pause], it's the temper thing that, that comes into it as well. So, my license is under review every year. Because the temper side of things is there; it's, it's hard to balance it. But actually, manoeuvring the car and being able to, you know, drive the vehicle, I can good."

(Ryan, male aged 37 years)

There appeared to be a sense of 'helplessness' as the participants described their experiences, as they seem unable to control their behaviour. A participant (Rachel) mentions that she would 'inevitably' get into trouble:

"Uhm, oh, I would, I inevitably I would get in trouble … In one way or another."

(Rachel, female aged 46 years old)

iii) Susceptibility to suggestions: ***"I would immediately just say 'yes'."***

Participants narrated instances where they accepted suggestions from friends and would execute suggestions without conscious thought or a sense of a mental 'filter'. The quote below was from a participant (Tom) who admitted doing a lot of 'stuff' due to suggestions from friends:

"Yes, I have got into stolen cars quite a few times with friends. I just did that without thinking. Then I got into trouble because my friend snitched on me! Also, another friend told me to steal alcohol from a store, so I did that. Lots of times I have done stuff friends have told me to do with no thinking."

(Tom, male aged 17 years old)

When asked if there was any time he accepted suggestions, Ellis agreed he had done this over '300' times, and then goes on to cite a few instances:

"Yes over 300 times. Examples include when my brother asked me to distract dad in the shop so that he could take something from the shop. When I was asked at school by an older student to go and get a football from the PE cupboard without asking anyone."

(Ellis, male aged 13 years old)

Tom below further states that once someone suggests an idea that 'seems fun', he just executes the idea:

"No, I don't think at all! I think 'that seems like a fun idea' at the time, if someone says something to me, I just do it."

(Tom, aged 17 years old)

Oliver while narrating his experiences during police interviewing acknowledged that he didn't really understand some of the questions he was asked to answer but that sometimes 'people just say "yes" to everything.' The participant in describing his situation and acceptance of suggestions during police investigation mentions that there was no 'rush' in the interview process but goes on to generalise acceptance of suggestions:

"Well, I think there was no rush. I didn't sometimes … I didn't really understand. And sometimes people just say yes to everything, but they don't know the meaning".

(Oliver, male aged 12 years old)

Offering an additional perspective, Rachel attributes the ease with which she would yield and accept suggestions during police investigation to the abuse and trauma she had undergone alongside FASD:

"And because I've had a lot of trauma and abuse in my life, and I absolutely certainly believed that what I did was due to myself. You know, I, I, completely blamed myself and whenever any of the lawyers or police you know would ask I would immediately just say 'yes'. It's all my fault. I did this. You know I did this, but I didn't have anything further than that to say like standing up for myself because I didn't know any better."

(Rachel, female aged 46 years old)

2) Encounters 'fuelled' by society

This overarching theme highlights the influence of 'external factors' as identified from the analysis of participants' data. The theme relates to circumstantial factors surrounding events that led to CJS encounters and also (external factors) that impacted participants' experiences during police investigative interviews. Four sub-themes were identified upon analysis – the CJS professionals' approach, lack of knowledge and exploitation.

i) CJS approach: ***"I would prefer it if the police did not intimidate me."***

The approach of the justice system professionals appeared to have impacted the experiences of individuals with FASD during CJS encounters. A majority of participants presented scenarios where the CJS professionals' approach was 'aggressive.' Tom (New Zealand) below states that the police should ask their questions 'less aggressively' and should not 'intimidate', 'falsely accuse' or put 'pressure' on him to 'admit to things' he hasn't done:

"The way the police approach young people, I think they should be more respectful and ask their questions less aggressively. I would prefer it if the police did not intimidate me or falsely accuse me or falsely charge me with things that I have not done. They should not put pressure on me to admit to things I haven't done."

(Tom, male aged 17 years old)

Tom further mentions how the police try to 'power trip' him, in other

words intimidate him, to get him to say he has committed crimes that he had not actually done:

"They try and power trip me, that means they are trying to get me to say I did stuff I haven't done […], they have told me I must do a formal interview and not stay silent. I feel that I always have to answer questions the police ask me.

(Tom, male aged 17 years old)

In narrating his experience during the CJS encounter, Ryan describes the approach and attitude of officers during his encounter(s), where he claims that police behaviour, such as laughing at him and being aggressive, provokes him to retaliate, which ends up with him in worse trouble:

"But then the other officers. They'll all come, they'll all be all over, and they'll be laughing. They'll be 'taking the mick'. [Unclear], and they're, they're aggressive. So, then that, that, that's then gonna make me think. Well, [unclear], it's, it's gonna really provoke the situation and just escalate into a lot. Yeah, of course they do so, so when they see, a few times it's turned into a situation where I've, it's been public disorder, just the minor of like swearing in public or something. But then because of the, 'cause of the situation where the police have been violent and aggressive, it's then turned into assaulting police and then, then, it, it, gets it just blows out of proportion."

(Ryan, male aged 37 years)

Tom makes a plea for more understanding from the police to help people they are approaching get less stressed and also, to allow time during investigative interviews for interviewees to process the questions:

"They should help people they are approaching to be less stressed … I, I would, I would say that they need to give people more time. Yeah, like I'll me I need more time to process stuff. So, like you know, no they don't give you enough time, no they don't. Because at the end of the day, they just want their money."

(Tom, male aged 17 years old)

ii) Some police officers are nice

The experience of police attitude was not uniformly negative. A few participants narrate that they have met with 'nice' police officers. While the definition of 'nice' remains subjective, participants highlight that not all the police officers they have encountered are 'bad.' For instance, during the course of interview, the first author (DJG) asks Oliver from the UK what his thoughts were about the questioning approach of interviewers and Oliver responds saying they were 'nice':

Oliver (male, aged 12 years old): "No, they were nice."

Russell below mentions that it is a hard question to answer but goes on to provide a mixed response to the question by saying some are nice, while others are not nice. Russell then further mentions that the way he dresses may be the issue why he was not treated nicely by the police he encountered:

"I would say. No, but yes, it's same time you know. I mean, it's kind of a hard question like, [pause], like they're just very, you know, I've been, it's like, like, it's like, police have been nice. Some of them are, some of them aren't, but you know, like at the same time you know, I think it's because like … like personally, right? It's probably like straight off the back, like the way I dress, right? Like the way I dress it, can you know, I'm kinda […], probably they look at me and then probably like right: "that guy looks a bit dodgy", you know."

(Russell, male aged 20 years old)

Ryan, in his narration below witnessed a different approach in his last encounter with the police. Unlike previous police officers who would take an aggressive approach by 'beating' or 'throwing' him into the cell, the sergeant handling his case appeared to have approached it differently. The sergeant requests the other officers to leave Ryan alone and 'let him go out on the exercise yard':

"I notice from the police, the other day with the, the experience I had the other day was a lot different to my, my previous experiences. The Sergeant seemed to know a little bit, like I was playing up, like I pressed the emergency bell. I was being stupid and acting silly. Normally the officers would have beat me out there, thrown me in the cell and they'd be rough, but they just said: 'look, just leave him alone. Let him go out on the exercise yard', and they locked the door. Obviously, they've got camera and everything, they just said: 'let him just get on with it'."

(Ryan, male aged 37 years old)

iii) Lack of Knowledge

In narrating their encounters with the CJS, participants were unsure that the CJS officials understood FASD. Several participants therefore advocated for increased knowledge and awareness about FASD within the CJS. Ellis highlights that it will be 'nice' for the police to understand the peculiarity of the brains of young people with FASD as their 'brains don't work in the same way as other young people:

"Not sure about advice. It would be nice for the police to understand that our brains don't work the same as other kids."

(Ellis, male aged 13 years old)

Increased awareness for CJS professionals seems to be the plea of Rachel as she presents a suggestion that CJS professionals take the time to ask about cognitive disabilities at the point of interaction with suspects of crime. This, in her words, will 'open the doors to better understand' the underlying factors to any conviction:

"If I could, I would tell, I would tell both police and, and lawyers in particular, that the police should try to, to try to understand, or try to maybe ask them if they have if they know if they have any cognitive or learning disabilities. I think just straight out asking do you know if you have been diagnosed with any cognitive or learning disabilities? I think that would be the tip of the iceberg for getting the door open for law enforcement and uh, lawyers to understand better, uh, what might be happening behind? Behind uh, someone's conviction: why they were, why they were convicted in the first place, what led to that?"

(Rachel, aged 46 years old)

Ryan highlights the importance of research in raising awareness and mentions that it becomes better when 'more people get educated':

"No, that's good. It's good to do these research things. Because then as I said, the, the person. It might be, it might, might be his first time coming in contact with the police and be very frightened. And if the police are speaking bad or negative or using wrong language, then that could provoke something, isn't it? But if the police understands, like maybe have some knowledge … Well, the more people that get educated then the better. It will be. Isn't it?"

(Ryan, male aged 37 years)

iv). Exploitation: ***"I was being manipulated all the time."***

The exploitation of participants' vulnerabilities was a common theme linked to CJS encounters. Participants highlighted how their vulnerability was exploited by friends or acquaintances who knew of their vulnerability. Ryan mentions how 'people' knew he was vulnerable and 'they take advantage':

"Yeah no. I was being manipulated all the time …. I'm easily influenced most of my record is about people, like, being with me, with being with the wrong people. Mixing with the wrong crowd and they, they know that I'm vulnerable and they take advantage."

(Ryan, male aged 37 years)

Narrating her experience leading up to her felony charge, Rachel narrates how friends and associates exploited her vulnerability by making her pay for 'non-existent bills.' Following the 'pressure' to fit in, this led the participant to forge signatures in to withdraw cash from the bank to satisfy friends, thereby leading to a forgery and felony charge:

"They discovered I had $3000, I paid for dinners, I paid for drinks. I, I lent money for non-existent bills."

(Rachel, female aged 46 years old)

Further down his interview, Ryan highlights how his vulnerability is also taken advantage of at work. He mentions that 'they know' of his vulnerability and 'take the mick' (British slang for 'take unfair advantage').

"I've been trying to work but the, it's, it's the same as well in the workplace. The people they, they know that I'm vulnerable so they, they can take the mick."

(Ryan, male aged 37 years old)

Russell highlights how he was being 'used' by 'a couple of people' he thought he could trust. As an instance, he narrates an incident in the past how he 'swapped' his good clothes for 'fake' clothes:

"But like when I was younger. Yeah, I had a couple of people that I thought I could trust. You know, like yeah. And this bunch was just using me. You know using me? [pause] like a guy basically like there was an incident back when I was younger with […] that basically like I swapped my good clothes for like his clothes, but his was like fake. You know, it was kind of like that, you know it was …"

(Russell, male aged 20 years old)

3) Self-awareness, remorse, and determination

Highlighted within several participants' quotes was a sense of self awareness. Ranging from awareness about their strengths and abilities, to a sense of awareness about the 'legitimacy' of their actions and also, a sense of remorse/desire to 'change'. Tom quoted below mentions that he has 'good characteristics' while in an earlier sentence mentions that he is 'good at speaking'. He demonstrates a sense of awareness or 'right' and 'wrong' by mentioning that he is 'good at stealing cars' but knows that it is 'wrong':

"I am approachable and funny and good at speaking. I have lots of friends. I have good characteristics. I am good at stealing cars, but I know that's wrong".

(Tom, male aged 17 years old)

Russell communicates a sense of helplessness as he expresses his desire to 'behave better' whilst he is in the middle of a criminal charge but ends up in the next trouble later. At the time of the interview, Russel had just been charged with a criminal offence and confirms his desire to 'change':

"Yeah, it's like, it's like my dad just said there. Like I'll say 'if I get off this charge, I'll change but, you know? I could just, you know, it's been like that for the past two years. You know I have just said that I'm like, OK, I'm at that one then. Next thing you know, a year later, I'm just getting charged in a different one again. So, I […] do want to change this time, and I know I might just be saying that, and I know I said that last time, but you know, I really, really do."

(Russell, male aged 20 years old)

Ryan mentions the co-morbidity of ADHD alongside his FASD diagnosis and says he 'used to do stupid things', and highlights immaturity as a contributor to his offending behaviour. Describing his actions as 'stupid' and immature reflect some level of self-reflection:

"I used to do stupid things. I have the ADHD as well and I act immature".

(Ryan, male aged 37 years)

When asked whether he considers consequences at points when he is angry, Ryan says 'no'; that he only becomes 'apologetic' once he has had time to 'reflect' on his actions:

"No, no, no. No, at the time; but when I sit in the police station or have time to reflect, I, I'm apologetic."

(Ryan, male aged 37 years)

Rachel in the US below demonstrates a strong sense of self awareness and determination to make a difference and 'motivate' others. She mentions attending school to obtain a degree with the hope that others will be motivated. Rachel further mentions

"Yeah, I'm going to school for social work and my objective with getting a social work degree is I want to, I want to concentrate with my own people, with Indigenous people … I don't want to say success story 'cause that sounds so cheesy right? But that, that I was able to achieve and to achieve a good, you know, a good positive healthy healing life. I think when other people can see that, they can think well, then if, if, she can do it, maybe I can too. You know?"

(Rachel, female, 46 years old)

5. Discussion

The current study aimed to capture the perspectives of individuals with FASD regarding the factors that predispose them to encounters with the justice system and their experiences during investigative interviews. Three major themes were generated from the data analysis: "personality/individual triggers to CJS encounters", "encounters 'fuelled' by society" and "sense of self-awareness".

The "personality/individual triggers to CJS encounters" theme reflected the range of characteristics of individuals with FASD which may render them vulnerable to CJS encounters. Impulsivity and behavioural issues were consistently inferred by participants. For example, a participant describes his actions as 'spur-of-the-moment' reflecting impulsivity. These impairments have been established to characterise the cognitive and behavioural profiles of individuals with FASD (Coriale et al., 2013; Mattson et al., 2013; Rasmussen, 2005). Impairments in executive functioning, which regulates goal-oriented behaviour, appears responsible for the impulsive and behavioural problems of this population. Because the executive function impairments are a result of lifelong and irreversible prenatal brain damage, only interventions to ameliorate or prevent secondary outcomes may be feasible. As mentioned by a participant, the prenatal impairments also seemed to create a sense of inevitable encounters with 'trouble'. Consistent with the proposed pathways to offending by Corrado and Freedman (2011), prenatal exposure to substance(s) such as alcohol, is considered a significant predisposing factor to offending. A similar finding about the

personality/individual triggers to CJS encounters (as found in this study) is published in the study by Pei et al. (2016). This finding highlights the need for CJS professionals to become aware of the vulnerabilities that predispose individuals with FASD to CJS encounters.

Participants in this study described stories that reflect their susceptibility to suggestions, leading to encounters with the CJS. A 13 year old participant described how they had accepted suggestions from friends and executed the suggestions without conscious thought over '300 times.' While this is likely to be figurative rather than an exact count of the number of times the participant accepted suggestions, it reflects the frequency with which the participant felt they were influenced by the suggestions of friends. Also, there was a generalisation from a participant that people say 'yes' to everything without understanding. This appeared to describe the participant's own situation, but the participant has generalised this to 'people'. While empirical evidence to the interrogative suggestibility of individuals with FASD remains scarce, a few studies have reported empirical evidence to the suggestibility of individuals with FASD (Brown et al., 2011; Gilbert et al., in press). Anecdotal evidence from parents of individuals with FASD also present consistent indication of the suggestibility of this population. For example, one participant highlighted that she easily yielded to suggestions and would just admit to interrogators that she was guilty. Susceptibility to suggestions may in the first instance influence CJS encounters, and the same 'attribute' can complicate the CJS encounters during investigative interviews. For instance, during investigative interviews, individuals susceptible to suggestions may produce false confessions.

One participant mentions her formative years being characterised by trauma and abuse, leading her to blame herself for mistakes. There is a significant association between prenatal exposure to substances and adverse childhood experiences e.g., trauma (Norman et al., 2012; Price et al., 2017). Both pre- and post-natal exposures are hypothesised to lead to poor outcomes (Price et al., 2017). However, a recent study concludes that in the presence of abuse such as neglect and prenatal alcohol exposure, behavioural difficulties are likely to be related to prenatal alcohol exposure (Mukherjee et al., 2019).

The scenarios described by participants reflect encounters with the CJS being impacted by exploitation, the lack of knowledge of CJS professionals, and CJS professionals' approach. With respect to the encounters with CJS professionals such as the police, participants narrated 'provoking' and aggressive approaches by the police. Previous studies have also highlighted 'aggressive' policing, although in the general population (Geller et al., 2014; Legewie & Fagan, 2019). The CJS' aggressive approach sub-theme is linked to the 'lack of knowledge' sub-theme. Lack of knowledge among CJS and other allied professionals has been highlighted in the literature (Gilbert et al., 2021; Passmore et al., 2018). As advocated by participants in this study, we argue that increased knowledge about FASD (and resulting vulnerabilities) in suspects of crime should impact the approach to police investigation approach (Passmore et al., 2021). As a 'counter-subtheme', a few participants highlighted that during encounters, the police officers were 'nice'. Following the probing of the 'nice' dispositions of officers, it appears this referred to the personal disposition of the officers rather than from a standpoint of FASD awareness. Thus, this study reports a mixed experience with participants' encounters with the police; however, none of the participants mention that they encountered police officers who were knowledgeable about FASD.

In the sub-theme of exploitation, participants narrated how acquaintances identified their vulnerability and took advantage of this, sometimes leading to CJS encounters. The interplay of vulnerabilities during CJS encounters have been the subject of past and recent publications (Gilbert et al., 2022; Gudjonsson, 2003a, 2003b). Gudjonsson and MacKeith (1997) argue that coping with CJS encounters (police investigative interviews) rely on the circumstances, nature of interactions, suspect's personality, and suspect's mental health, mental state, and physical health. While these factors are important considerations during CJS encounters, the same factors may also be the underlying reasons for offences committed. Within the literature, there are also widespread calls for support of individuals with FASD within the justice system (Hamilton et al., 2019; Pedruzzi et al., 2021; Reid et al., 2020; Sanders & Buck, 2010).

As highlighted within the literature, the association between FASD and criminal behaviour is neither direct nor simplistic (Corrado & McCuish, 2015; Mukherjee et al., 2023). There exists the potential interplay of several factors leading to CJS encounters and also, which may impact encounters. For instance, a number of themes/sub-themes identified from participants' stories appear to bear some level of inter-relationship. The subtheme of impulsivity may lead to behavioural issues and susceptibility to suggestions; susceptibility to suggestions may also impact the extent to which individuals in this population are 'manipulated' leading to CJS encounters. These potential relationships are represented by dotted arrows – see Fig. 1.

While narrating their stories, self-awareness (as a theme) was evident from the participants. Awareness about their strengths, abilities and peculiarity was demonstrated; this, however, was more clearly seen in the older participants in comparison to the younger. Older participants also were more vocal and self-reflective; for instance, one of the participants identified his strength as 'speaking' and later goes on to show additional level of awareness by highlighting that although he is good at car theft, he 'knows' that this is wrong. Remorse and the desire to 'change' was another level of self-reflection mentioned by participants; although the participant was self-aware that despite several resolution to 'change', he is still persistently charged with different offences after each resolution. These comments imply some level of appreciation for what can be described as moral, ethical, or legal 'rightness' or wrongness'. However, it seems behavioural outcomes are beyond the willpower of participants and may not reflect the 'true identities' of participants. One participant narrated how a CJS officer told him that he was not 'bad' but executes behaviours deemed inappropriate ('silly'). Further to this sense of self-awareness highlighted above, a strong sense of determination to positively impact society is projected from the comments of a participant who wishes to provide a sense of 'hope' to others with FASD. Similar strengths as found in this study are reported by the critical and narrative review of literature (Flannigan et al., 2021; Skorka et al., 2020). The participants in this study represent a sub-sample of individuals with FASD who have been in trouble with the law; while they are at high risks of CJS encounters (hence the focus on their vulnerabilities), the literature confirms existing strengths and abilities in this population.

6. Legal implications and recommendation

Individuals encounter the CJS as either suspects, victims, or witnesses of crime. A significant level of meta-cognition is required during encounters with the CJS and in the process of proving innocence. This may be lacking in individuals with FASD due to the frontal lobe damage by prenatal alcohol exposure (Greenspan & Driscoll, 2016). Diminished psycho-legal abilities and vulnerability to manipulation have also been evidenced in the FASD population (Clark et al., 2008; McLachlan et al., 2014). Commencing with the investigative interviewing stage, individuals are expected to present an accurate narration about the events about which they are been questioned. Individuals with FASD may struggle with these as neurodevelopmental impairments in several domains is typical in FASD (Bower et al., 2018). These impairments may lead to problems with memory recall and confabulation (Brown et al., 2020). Not to be confused with lying, confabulation is characteristic of neurodevelopmental disorders and describes the replacement of poor recollection of actual events with events that never occurred, without an intention to deceive (Brown et al., 2013; Moscovitch, 1995). There is therefore need for increased awareness within the CJS about FASD; the triangulation of evidence provided by individuals with FASD either as suspects, witnesses or victims of crimes will aid procedural justice

(Fisher-Hicks et al., 2021).

Alternative approaches in forensic interviews may be necessary. In the literature, a few alternative methods have been proposed including but not limited to 'cognitive interviewing' (Meyer et al., 2019; Gieselman et al., 1984) and 'yarning' (Hamilton et al., 2020). Cognitive interviews employ mnemonics and four memory retrieval rules with several supplementary techniques (Geiselman et al., 1985; Meyer et al., 2019), while originating from Australia, 'yarning' presents story telling in a conversational manner which offers an opportunity for participants to relay stories in a less 'formal' interview setting (Bessarab & Ng'Andu, 2010; Fredericks et al., 2011). Both methods provide positive environments and prompts for adequate self-expression, especially for participants with cognitive difficulties. Consideration of clinical history prior to the CJS interview, vulnerability screening (e.g. measurement of suggestibility), modification of questioning style, minimisation of factors that may generate physical and emotional stress are some of the guidelines proposed in the review literature to aid equitable administration of justice for this population (Brown et al., 2020).

7. Limitations

The difficulties in interviewing this group of participants were evident in the data collection described above. Some of the difficulties encountered may be due to the data collection approach employed in the study. Alternative methods in future studies may be useful. Furthermore, the sample size in this study is not a generally representative sample and causal relationships could not be determined from the narrated experiences. Also, there exists the potential of bias in the sampling as support organisations assisted in recruitment and the use of social media to advertise the study may have excluded parents who are not on social media platforms.

8. Conclusion

Individuals with FASD in this study narrate their perceptions of the vulnerabilities that predispose them to encounters with the CJS and their experiences during investigative interviews. This study adds knowledge by providing insight into the personal reflections of individuals with FASD including their strengths and sense of self awareness. Some level of adaptation was necessary to obtain stories, as parents/carers sat alongside their child (ren) to provide support. Also, parents/carers assisted to administer interviews. Procedural justice will benefit by triangulating evidence and employing alternative methods in obtaining information via interviews from the FASD population due to their vulnerabilities.

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