

# A differential pathway into secure care: Compulsory care orders as a marker of elevated adverse childhood experiences (ACEs) in adolescents with a developmental disorder

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*This paper reports on the pathways into secure care for adolescents detained to an inpatient developmental disorder service. Findings highlighted differences in the demographic and clinical profiles and pre-admission histories of those who had been removed from the family home.*

## Introduction

**C**HILDHOOD trauma has been linked with a wealth of adverse outcomes pertaining to psychosocial functioning (van Duin et al., 2019), physical health (Hughes et al., 2017) and premature mortality (Rogers et al., 2019). Recognising such experiences is vital to better respond to the holistic needs of those accessing services and ultimately enhance the efficacy of care. One population with a particular need for trauma-informed care are people with a developmental disorder (Morris

et al., 2020). Rates of adverse childhood experiences (ACEs) in people with a developmental disorder surpass those reported within neurotypical samples (Giano et al., 2020), with particular elevations in specialist intellectual disability secure inpatient settings (Morris et al., 2020). Yet, despite presenting with elevated trauma exposure, this population remains significantly under-researched.

Whilst elevations in ACE prevalence within the developmental disorder population are

likely to reflect a multitude of inter-related factors, equally, the impact of ACEs is complex and poorly explored in this population. Besides longer-term psychosocial and health adversities, one immediate consequence can be removal from family home, by virtue of a compulsory care order (CCO). Under a CCO, a child who is suffering or at risk of suffering substantial harm is placed under the legal responsibility and care of the local authority, as enacted by the court. Children with developmental disorders are significantly more likely to be subject to CCOs (Ogundele, 2020), yet the longer-term consequences on the trajectory of care needs, especially in relation to more specialist services, remains unquantified.

Additionally, people with a developmental disorder are over-represented in secure forensic settings (Hales et al., 2018), where high levels of trauma exposure and CCOs have been reported (Morris et al., 2020). Thus, research is warranted to untangle the relationship between ACEs, CCOs and offending behaviour in developmental disorder populations to improve outcomes for this particularly disadvantaged population.

The failure to elucidate that relationship represents a key omission in research. Therefore, this report explores the characteristics and pre-admission histories of adolescents detained to a secure developmental disorder service who were and were not subject to a CCO. Specifically, we aimed to compare demographic and clinical profiles, prevalence and types of ACEs experienced, and placement histories prior to admission.

## **Method**

### ***Design and participants***

Data was extracted from case records of admissions to a secure forensic Child and Adolescent Mental Health Services' (CAMHS) developmental disorder inpatient service between February 2014 and January 2020. The service provides specialist care for adolescents with a primary developmental disorder diagnosis across low and medium secure wards. Participants were a convenience sample of 41 adoles-

cents detained under the Mental Health Act (1983, amended 2007), 36 of whom match the sample of a previous study (Morris et al., 2020).

### ***Materials and procedure***

Data pertaining to ACEs was extracted from existing clinical records via file review using the ACE questionnaire (Felitti et al., 1998). This ten-item measure assesses exposure to five 'child maltreatment' adversities (physical, emotional and sexual abuse, physical and emotional neglect) and five 'household' adversities (parental incarceration, separation, substance abuse, mental illness and witnessing of violence against a parent). Participants receive a total score (0–10) as well as a subscore (0–5) for each of the two ACE types (Ford et al., 2019).

Demographic and clinical information including age, diagnoses and placement histories, were extracted from existing participant records.

### ***Data analysis***

Assumptions of normality were not met and non-parametric analyses were utilised. Differences between participants who had ( $N=16$ ) and had not been subject to a CCO ( $N=25$ ) were explored using Mann-Whitney U, Fisher's Exact and Chi-Square tests.

### ***Ethical considerations***

The study was approved by clinical governance structures within the organisation as a service evaluation project. Data was anonymised before commencing analysis.

## **Results**

### ***Demographic characteristics***

#### ***Within groups***

Across the sample, participants' age ranged from 10–17 years at admission ( $M=15.27$  years,  $SD=1.3$ ). Participants were mostly male ( $N=32$ , 78 per cent), White British ( $N=28$ , 68.3 per cent) and most commonly had a diagnosis of mild intellectual disability ( $N=23$ , 56 per cent). Sixteen participants (39.0 per cent) had been subject to a CCO.

There was a significant association between group and gender ( $p=.011$ ); females were more likely to be in the CCO group, whilst males were more likely to be in the non-CCO group. No significant association was found between group and ethnicity ( $p=.18$ ) nor age at admission ( $U=222.00, p=.57$ ).

*Clinical profiles*

Participants who had been subject to a CCO had an average of 1.44 developmental disorder diagnoses ( $SD=.96$ ) whilst participants who had remained in the family home had an average of 2.2 ( $SD=0.76$ ); this difference was significant ( $p=.007$ ).

There were no significant differences between groups for number of mental health diagnoses ( $U=235.50, p=.35$ ), total length of inpatient admissions ( $U=214.00, p=.47$ ), length of current admission ( $U=247.50, p=.21$ ) nor total number of care needs ( $U=190.00, p=.80$ ).

*Adverse childhood experiences*

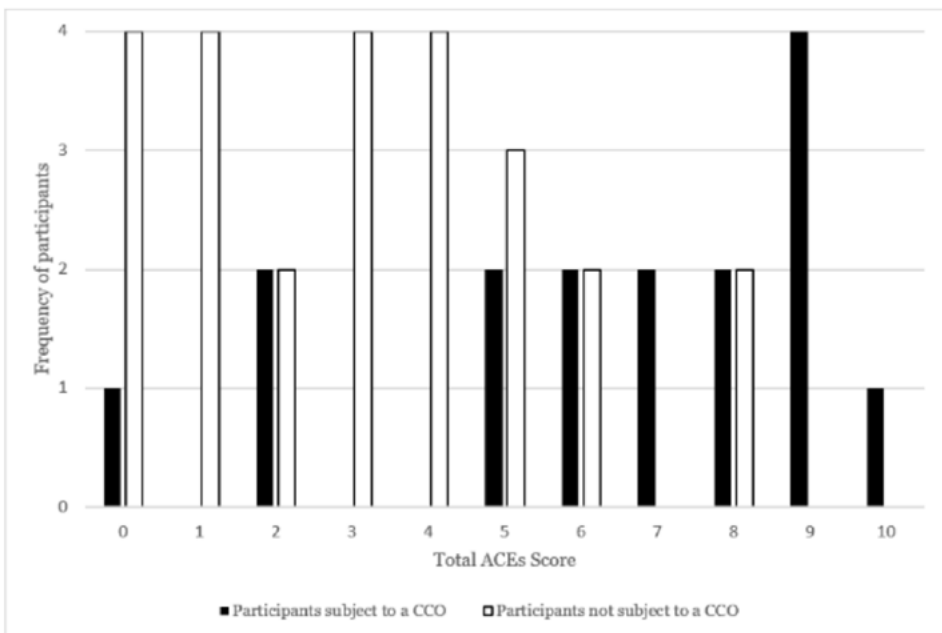
Exposure to at least one ACE was highly prevalent, with rates of 93.3 per cent and 84.0 per

cent in participants who had and had not been subject to a CCO, respectively; this difference was non-significant ( $p=.34$ ).

There was a significant difference in total number of ACEs experienced ( $U=322.00, p=.001$ ), with participants subject to a CCO experiencing a greater number of ACEs ( $M=6.37, SD=2.94$ ) than participants who remained in the family home ( $M=3.16, SD=2.39$ ). Participants subject to a CCO reported significantly more child maltreatment ACEs ( $U=325.00, p=.001$ ) and household ACEs ( $U=284.00, p=.02$ ) than participants who remained at home. Participants subject to a CCO had five times the odds of experiencing four or more ACEs ( $OR=5.52, 95$  per cent  $CI: 1.25-24.30$ ), and eleven times the odds of experiencing six or more ACEs ( $OR=11.55, 95$  per cent  $CI: 2.57-51.95$ ).

Specifically, participants who had been subject to a CCO reported significantly higher rates of exposure to sexual abuse ( $p=.016$ ), physical abuse ( $p=.01$ ), physical neglect ( $p=.002$ ), emotional neglect ( $p=.004$ ), and parental substance abuse ( $p=.002$ ). There were no significant differences between groups for any other ACEs.

Figure 1: Total number of ACEs reported by participant frequency



### *Placement breakdowns*

Participants subject to a CCO were more significantly likely to have experienced a placement breakdown than participants who remained in the family home (81.3 per cent vs. 24.0 per cent;  $p < .001$ ). Furthermore, the total number of placement breakdowns experienced was significantly higher for participants who had been subject to a CCO ( $M = 3.81$ ,  $SD = 3.66$ , range = 0-13) compared to participants who had remained in the family home ( $M = 0.68$ ,  $SD = 1.35$ , range = 0-5;  $p < .001$ ).

### **Discussion**

In line with previous findings, exposure to ACEs was high across the sample, exceeding rates reported in the general population (Giano et al., 2020). Expanding upon current literature, the present study highlighted significantly higher exposure to ACEs in participants who had been subject to a CCO, than participants who had not. Gender differences were apparent, with females being more likely to be subject to a CCO. However, this is likely explained by the higher ACE exposure in females residing in the service, as evidenced in an earlier study (Morris et al., 2020).

Specifically, participants subject to a CCO had experienced significantly greater exposure to physical and sexual abuse, and physical and emotional neglect, at the point of admission. This is perhaps unsurprising, given that inadequate care and an unsafe household environment precedes the removal of a child from their home. Participants subject to a CCO also reported significantly higher rates of household ACEs collectively, than participants not subject to a CCO, and significantly greater exposure to parental substance use, specifically. All other household adversities were frequently experienced by both groups, proportionally.

Furthermore, participants who had been subject to a CCO had experienced significantly more placement breakdowns, in addition to their initial removal from the family home. This is consistent with previous evidence highlighting a vulnerability for multiple placement breakdowns in those residing in an out-of-

home setting (Bryson et al., 2017) with figures of up to 13 breakdowns reported in an inpatient adolescent developmental disorder population (Morris et al., 2020).

Collectively, findings suggest the initial experience of being removed from the family home is followed by an additional layer of re-traumatisation through 'institutional ACEs', such as placement breakdowns, likely further exacerbating disruptions in attachment bonds and wellbeing. Thus, addressing the traumatic experiences and their impact on needs of this population is crucial in effectively responding to the particularly adverse outcomes associated with removal from the family home. This is especially crucial to mitigate the cumulative 'dose-response' effect of adversity, with greater ACEs and placement breakdowns translating into poorer outcomes (Webb et al., 2021).

Participants who were not removed from the home via CCOs reported a significantly greater number of developmental disorder diagnoses. It is possible that the greater number of developmental disabilities meant that greater levels of statutory support and specialist education provision were in place, reducing the risk of exposure to multiple adversities and removal from the family home. However, the study did not collect data relating to wider statutory involvement and thus can't conclude whether complexity in developmental disorder needs, measured by the number of diagnoses, and statutory service involvement is a protective factor.

### *Clinical implications*

Irrespective of CCO status, the elevated levels of exposure to ACEs and placement breakdowns found in this study for all participants confirm the need for developmental disorder services to give parity of esteem to trauma-informed, as well as developmental disorder, service frameworks. That said, the current results, in the context of wider evidence, suggest that experiencing a CCO in childhood may indicate more pervasive trauma needs and an elevated risk of institutional re-traumatisation through future placement failures. The elevated ACE exposure in those who experience CCOs, in

the context of being in a population with a pre-existing vulnerability for early adversity, confirms the importance of early intervention work to mitigate the amplifying impact of removal from the family home on adverse outcomes. Within clinical services, the presence of a CCO in the clinical history of referrals indicates a red flag for clinicians working with this population to be vigilant to the potential myriad of trauma-related care needs. As such, services should ensure that CCO status and ACEs are routinely screened and considered within care planning priorities, at the point of admission.

Additionally, given the association between CCOs and future placement breakdowns, screening and care planning should go beyond the current ACEs framework to also consider institutionally driven adversities, including the number of previous placements, and their impact on care needs and outcomes.

### ***Limitations and future directions***

The complex characteristics and needs of the small, specialist sample employed limits the generalisability of the findings beyond this population. Additionally, some participants were under the age of 18 at the time of data collection and may experience further ACEs, resulting in the potential under-reporting of ACE prevalence. Furthermore, reasons for placement breakdowns were not collected. Moving forward, this should be prioritised within future studies, in order to better understand the mechanisms by which early adversity drives later instability in placements.

In addition, the greater number of developmental disorder diagnoses in participants not subject to a CCO warrants investigation. Specifically, exploration of the care pathways and pre-admission contact with services is needed to determine whether statutory service

involvement protects against further adversity and removal from the family home.

Finally, insight into the impact of such experiences on wider clinical outcomes is necessitated. In particular, the role of institutionally driven ACEs on care needs and long-term outcomes remains a significant research priority.

### **Conclusions**

Overall, the present study provides novel insight into the differential pathways into secure care of those subject to a CCO in an inpatient developmental disorder population, characterised by greater exposure to ACEs and placement breakdowns. As such, the results evidenced here highlight the need for specialist inpatient developmental disorder services to give parity of esteem to trauma needs, if the holistic needs of such a population are to be met.

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