

that do not identify as male despite it being written on their birth certificate; however, the majority prefer to be identified as male. This suggests that certain individuals with KS are at higher risk of gender dissatisfaction and dysphoria. Importantly, these observations are not substantiated with clinical judgement of a psychiatrist/mental health worker, which should aim to be incorporated in future research. Additionally, longitudinal studies should aim to establish whether certain age groups would be more at risk of gender dissatisfaction and gender dysphoria or if trends change with age.

### A Pilot Study of Service Utilisation Pathways of Patients With Distinct Psychotic and Antisocial Typologies

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**Aims.** There is a developing body of research that suggests that there may be distinct categories of patients that can explain the relationship between psychosis and antisocial behaviours. Specifically, three pathways of offending, antisocial behaviour and psychosis have been described and there is an evolving empirical evidence base to suggest that these pathways are aetiologically distinct. Firstly, there is a pathway for early-start offenders, which have been identified as those with psychosis preceded by Conduct Disorder (SZ + CD). Secondly, a group that start to display antisocial behaviours in parallel to the onset of psychosis (SZ-AS). The third group involves those with a long history of a psychotic disorder and no history of antisocial behaviours, who will present to services following a first conviction for non-violent or violent crime (SZ). The authors hypothesise that each typology will utilise services differently throughout the clinical trajectory. This pilot study aimed to (i) examine the concurrent validity of the antisocial behaviour and psychosis typologies, and (ii) examine differences in the service utilisation patterns of patients between these groups.

**Methods.** The sample consisted of adult male patients admitted to low and medium secure forensic hospitals within the Northwest of England. A total of 90 patients were used.

A categorisation checklist was developed, and the typology of patients determined from data collected from electronic health records. Data were collected on patient demographics, psychiatric diagnosis, aetiological factors, and service utilisation. Two researchers reviewed the data and determined the typology. Statistical analysis aimed to assess the difference in aetiological variables between the typologies and examine the relationship with how each typology utilised services.

**Results.** This study provided further evidence of distinguishing characteristics emphasising typology heterogeneity.

The CD-SZ group were more likely to have utilised mental health services <18 years (70%,  $p = 0.062$ ), and to have used

services preceding a diagnosis of psychosis (60%,  $p = 0.011$ ). Following the onset of a psychotic disorder, the AS-SZ and SZ groups had a higher proportion that used general adult psychiatry services ( $p = 0.031$ ), with CD-SZ coming in to contact with forensic psychiatry services and criminal justice services earlier and more frequently.

**Conclusion.** This study demonstrates that each typology has a different clinical trajectory through mental health services. This provides further empirical evidence towards different clinical typologies and trajectories of individuals with psychosis and antisocial behaviour. Understanding more about how these typologies utilise services will enable clinicians to introduce interventions help develop effective management plans that address the distinct characteristics of each typology of offender with psychosis.

### Theory of Mind Deficits in Bipolar Disorder in Remission

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**Aims.** Theory of mind (ToM) is the ability to represent one's own and other's mental state. Studies in bipolar affective disorder show mixed results possible due to confounding factors like intelligence, attention, phase of illness and current mood. Purpose of this study is to study ToM in remittent bipolar disorder patients and compare with normal controls to find if there are residual deficits during remission

**Methods.** 40 bipolar patients in remission and 40 age and sex matched controls were recruited. Clinical remission for 3 months with YMRS <4 and HAM-D <7 was inclusion criteria. ToM was assessed by Faux Pas test. Data were analysed using SPSS-11.5 for Windows with parametric and non-parametric tests as indicated. Level of significance taken as  $p < 0.05$  (two tailed).

**Results.** Mean age of onset of illness in patient group was 23.8 years with duration of illness 11.3 years. Mean number of episodes 6.7 and duration of remission 4.15 months. ToM test result revealed deficit in recognizing social cues in faux pas test by bipolar patients as compared to normal controls. There was no difference between both groups in test result on control stories.

**Conclusion.** Results suggest that ToM deficits are present in bipolar disorder patients even during apparent clinical remission, indicating it may be a trait marker of the illness. There is no deficit in understanding a regular social context without faux pas. It also revealed that there is no correlation with ToM and duration of illness

### The Prevalence of Autism in the Criminal Justice System: A Systematic Review

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**Aims.** Autism prevalence is currently estimated to be approximately 1%. Ascertaining autism prevalence within the Criminal Justice System (CJS) has implications for understanding clinical and forensic need, alongside facilitating autism-specific CJS responses. This review aims to systematically identify and synthesise studies that investigate autism prevalence within CJS cohorts, and CJS involvement in autistic cohorts.

**Methods.** A systematic review of published studies that investigated autism prevalence within the CJS. A systematic search of major online databases was conducted in November 2021, including the ancestry method/expert consultation. Studies were qualitatively analysed, with reporting quality appraised.

**Results.** The search yielded 6491 articles. Following duplicate removal, 2942 articles remained for screening, of which 2857 did not meet inclusion criteria. Therefore, full texts of 85 articles were accessed, and 34 qualified for inclusion.

Prevalence rates of autism in the CJS were examined in 19 studies, 12 focused on forensic settings (e.g. secure psychiatric services/prisons/court), with 7 focused on forensic psychiatric assessment referrals. Prevalence rates of autistic people within the CJS reported by the included studies varied from 1–60%. This variation appeared related to factors such as the characteristics of the forensic setting/cohort, the method of autism screening/diagnosis, and whether participants had co-occurring intellectual disabilities.

Prevalence rates of CJS involvement in autistic populations were examined in 15 studies, with reported rates varying by 3–48%, with variation appearing related to a lack of cohesion in the definition of CJS involvement, with focus on variables including self-reported offending behaviour, police contact, or criminal convictions. These studies reported rates of offending by autistic people at a rate equivalent to, or lower than the general population/comparison sample.

**Conclusion.** Studies examining prevalence of CJS involvement among autistic people indicate a rate of offending at a lower, or equivalent level to the general population or comparison samples. However, studies examining prevalence of autistic people within CJS settings suggest they are over-represented. Possible explanations fall within three categories:

- pre-sentencing CJS factors - e.g. autistic people being more likely to be caught for their criminal behaviour, to confess during police interviews, to enter a guilty plea, or to have difficulty advocating for their rights in court
- autistic offender factors – whether autistic people who do engage in criminal behaviour, engage in behaviour of a higher severity, possibly reflecting high rates of comorbid mental disorder
- post-sentencing CJS factors – whether autistic people who offend are sentenced more harshly, or the possibility that a lack of autism sensitive forensic rehabilitative programmes and risk assessments may contribute to longer stays within forensic settings.

### Origins of Callous-Unemotional Behaviours in Infants

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**Aims.** Callous-unemotional (CU) trait is a characteristic of conduct disorder. As CU-like behaviours emerge from early childhood, this could potentially be predicted early on in life. There is debate in whether general or specifically fear expression processing was impaired in those with CU traits. No studies

investigated subliminal emotion processing in those with CU traits. Hence, this study addressed two questions. Firstly, we investigated whether attention to general facial expression or fearful expression is related to future CU behaviours. Secondly, we examined whether subliminal emotion processing can predict CU behaviours alongside supraliminal emotion processing by comparing EEG data to CU behaviours.

**Methods.** We performed EEG on 7 months old infants using fearful and happy faces as stimuli to investigate whether attention bias to general facial expression or fearful expression is related to future CU behaviours through the Nc component (300–600ms). We also used both subliminal and supraliminal eliciting techniques to determine whether there are any differences in terms of prediction of CU behaviours. The ERP data were then compared with behavioural data, including aggression and empathy scores, collected when the participants reach 14 to 18 months old through the infant-toddler version of the Multidimensional Assessment of Preschool Disruptive Behavior (MAP-DB) and the infant empathy and prosocial behaviour (IEPB) questionnaires.

**Results.** A total of 18 infant participants were included in our analyses. There is a significant interaction between emotion and empathy for the Nc component, but not aggression. Infants with low empathy paid less attention to fearful facial expressions compared to happy facial expressions while those with high empathy paid more attention to fearful facial expressions compared to happy facial expressions. Moreover, subliminal and supraliminal emotion processing had similar ERP eliciting ability.

**Conclusion.** Our study showed those with less empathy have a different pattern of attention bias to emotional expression and are less sensitive to fear emotion. Attention bias to emotional expression during infancy could be used to predict CU behaviours during toddlerhood. Being able to predict CU behaviours before their occurrence could help identify those in need of early intervention and help identify potential participants for longitudinal studies that could aid the development of interventions and understanding of CU behaviours. Furthermore, subliminal and supraliminal emotion processing has a similar predicting ability for CU behaviours. This is the first study that investigated subliminal emotion processing in infants with CU behaviours. Future studies would need to include a larger sample size to verify our findings.

### The SHIELD Project: Designing an Intervention for Social Media With Young People

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**Aims.** The primary aims of our study is to gather ideas from young people about developing an intervention for children who first started using social media. Our study also aims to investigate whether different types of social media use are associated with impact of social media on emotions and self-esteem.

**Methods.** An anonymous questionnaire was distributed to young people (16–25 years old), who were UK residents, through word of mouth, social media and university newsletters. We assessed participants' baseline characteristics, including types of social media use (active, active-passive and passive), impact of social media. We also explored young people's idea on developing a social media intervention, including how it should be delivered,