for use in Europe, and a recent NICE briefing (2023) highlights its efficacy and safety. The evaluation also references positive results from randomised controlled trials (RCTs), showing Flow leads to better outcomes than placebo stimulation.

Methods: This service evaluation assessed the use of tDCS for treating depression in Community Mental Health Teams (CMHT) for patients who hadn't responded well to medication or wanted an alternative. After a clinical interview and assessment, eligible patients were offered the treatment. Outcome data was collected at baseline and again after 6 weeks, using the Montgomery– Åsberg Depression Rating Scale (MADRS). The treatment involved patients self-administering tDCS for 30 minutes, five times a week for three weeks, then three times a week for three more weeks, with option of continuing as needed. The "Flow" system also includes a lifestyle training app and symptom tracking, allowing patients and clinicians to monitor progress online.

The study used an open-label design without a control group, with 20 participants (12 males, 8 females), of whom 16 shared their progress on the online platform and were included in the analysis.

Results: We analysed 16 data sets, which showed the following **Results:** the average MADRS score at the initial assessment was 32. By week 6, 82% (12/16) of participants had improved on the MADRS scale, with 44% (7/16) demonstrating clinically significant improvement, marked by a reduction of more than 25% in their MADRS score.

Conclusion: These results indicate that tDCS portable device "Flow" treatment is a promising and valuable intervention for treating depression in adults in CMHT service.

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Head Injuries and Serial Killers: Explore the Link Between Head Trauma and Criminal Behaviour

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Aims: This research aims to investigate whether there is a significant correlation between head injuries and the development of violent, repetitive criminal behaviours, particularly serial killers. Examining the neurological and psychological factors associated with head injuries. This study seeks to understand better their influence on criminal tendencies and patterns of behaviour.

Methods: 1. Neuroimaging: This showed reduced amygdala and frontal cortex interconnection.

2. Documented cases of serial killers with a history of head injuries.

3. Nature and timing of head injury; behavioural changes post-injury.

4. Statistics from findings out of 11 serial killers that were studied.

Results: 1. Neuroimaging showed reduced amygdala and frontal cortex interconnection and decreased grey matter.

2. High-profile serial killers who had documented head injuries: Richard Ramirez, Glen Edward Rogers, and John Wayne Gacy. Arthur Shawcross, Fred West.

3. Nature: Richard Ramirez, aged 2; a dresser fell on him and aged 5 was knocked out by a swing in the park; both of these caused him to have epileptic seizures throughout his childhood (temporal lobe epilepsy). Glen Edward Rogers, aged 1–2, would rock back and forth, continually banging his forehead against hard surfaces; Arthur Shawcross, aged 16, was hit in the head with a sports discus; and Arthur Shawcross, aged 19, fell off a ladder, concussing himself. Fred West, aged 17, had a motorcycle accident, and aged 19, was punched in the face, which led him to fall two floors, causing him to black out and frequently suffer from violent rages. Brain injuries before the age of 5 permanently disrupt the development of key foundational brain structures, whereas brain injuries in teenage years disrupt ongoing development, altering existing behaviour. Behavioural changes post-injury: emotional instability, social withdrawal, impulsiveness, and poor decision-making.

4. 80% of the most high-profile serial killers have had significant brain injuries.

Conclusion: The findings suggest that head injuries, especially those affecting specific brain regions, can lead to problems with impulse control, emotional regulation, and decision-making. Findings also suggest that timing plays a key role too. Early-life brain injuries, particularly during critical developmental stages, disrupt emotional and social development, whereas brain injuries during adolescence often impair impulse control and judgment. For example, the parts of Richard Ramirez's brain that were damaged were his prefrontal cortex and temporal lobe. These injuries link to his crime as his crimes escalated in brutality, his sadistic behaviour, and also his opportunistic and impulsive nature. Arthur Shawcross similarly, although his injuries were in adolescence, led to sexual deviance and compulsions leading to abnormal sexual behaviour.

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Nature-Based Learning and Autism: A Systematic Review of Autistic Children's Emotional Health and Behavioural Outcomes

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Aims: Autism Spectrum Disorder (ASD) is a complex neuro-developmental condition that affects social interaction, communication, and behaviour. Many children with ASD experience emotional dysregulation, heightened anxiety, and challenges in mainstream educational settings. Nature-based learning (NBL), including forest schools and outdoor education, has been proposed as an alternative approach that may support the emotional well-being and behavioural outcomes of autistic children. This systematic review examines the impact of NBL on children with ASD, focusing on emotional health, behavioural changes, and educational engagement.

Methods: A systematic search was conducted across four databases (PsycINFO, CINAHL, PubMed, and Embase) to identify primary studies examining the effects of NBL on autistic children. Additional sources, including grey literature and reference lists, were screened. Studies were included if they assessed behavioural, emotional, and educational outcomes in children under 18 years old diagnosed with ASD. Data were extracted and synthesized narratively to identify common themes.

Results: Eight studies met the inclusion criteria, comprising qualitative, quantitative, and mixed-methods research. Findings indicated that participation in NBL was associated with

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