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Casistica

The close link between altruistic and acute psychotic filicide: two case studies

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Abstract

Filicide is a rare and complex event with multiple causes and characteristics related to the circumstances in which it occurs. This article examines two cases of filicide in which a father (first case) and a mother (second case) stabbed their children, placing the analysis in the context of the relevant scientific and clinical literature. In these cases, there was contact with local health services prior to the offences, suggesting that the two concepts of altruistic filicide and filicide associated with severe psychiatric pathology should be considered interdependent and closely linked. It is of interest to examine how dyadic deaths are often significantly influenced by the sociodemographic characteristics of the perpetrators and their psychopathology. Over the years, there have been several classifications based primarily on the motivation for action of the impulse to kill. The scientific literature has found a significant correlation between filicide and pre-existing psychiatric pathology in the parents, with mood disorders having psychotic features being the most common.

In addition, severe mental illness often occurs in cases of filicide-suicide. In both cases presented in this article, a psychiatric assessment was requested by the judicial authority: The parents were involved in extremely stressful life circumstances and events, and suffered from social isolation or a lack of relationship support. In the case of filicide, in which the protagonist was the mother (second case), there are reports of sexual abuse at a young age and a suicide attempt after her daughter was killed.

Although in many classifications "compassionate" and purely "psychotic" filicide appear as two distinct nosographic entities, the present work suggests that it is important for professionals working in the forensic field to pay particular attention to the presence of psychiatric disorders in filicide, especially in the context of "delusional altruism", which is a circumstance in which the psychotic category may also include compassionate homicidal motivations.

Keywords: Filicide, Family violence, Psychopathology, Dyadic deaths, Forensic psychiatry

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The close link between altruistic and acute psychotic filicide: two case studies

Introduction

Despite the terms of neonaticide, infanticide, and filicide being often used interchangeably in child homicide studies, in the scientific literature filicide is defined as the murder of offsprings, regardless of the victim's age after the first year of life (Lattanzi et al, 2020). Specifically, neonaticide is the killing of an infant within the first 24 hours after birth, perpetrated only by the mother, while infanticide is the killing of a child less than 1 year of age. Hence, filicide exemplifies the rare and tragic outcome of a chain of heterogeneous vulnerabilities and events (Yang et al, 2022), and in this article it is the term used to signify this lethal violence independent of the age of the victim.

The social reaction to the killing of a child perpetrated by parents is of shock exasperated by a sense of social taboo (Dixon et al, 2013): in current society parents are thought of being naturally programmed to be caring and protective towards the physical and emotional wellbeing of their children (Klier et al, 2019). Despite filicide rates having declined in Western countries ranging from 2% to 10% (Craig, 2004; Mariano et al, 2014), epidemiological data suggest that parents are responsible for more than half of deaths of their children both in infancy and in childhood (Bourget et al., 2007; West, 2007).

According to the World Health Organisation (WHO), regions with the highest rates of killing of children under the age of 5 include North America and Sub-Saharan Africa, while Europe and Asia report the lowest rates (Ssekitto et al., 2024). Several classification systems of filicide have been proposed over the years, most of which are based on motivational factors and an impulse homicidal act. Resnick (1969), for instance, distinguished five categories: altruistic, acutely psychotic, unwanted child, accidental, and spouse revenge. Bourget and Bradford (1990) proposed a classification based on different type of information which is still notable for introducing a single pathological category (incorporating altruistic motives, homicide–suicide, and psychotic suicide), and paternal filicide. By creating this final group, the authors were the first to highlight the importance of differentiating between maternal and paternal child murder (West et al, 2009; Bourget et al, 2007). Descriptive results from many studies have highlighted the presence of major mental illnesses, especially psychosis and depression, as one of recurrent factors leading to filicide (Lysell et al, 2013). Often the severity of psychiatric disorders was not recognised prior the fatal event, and various psychiatric alerts, including indicators of delusional or paranoid thinking were missed by professionals (Sidebotham & Retzer, 2019). Homicidal parents show high rates of suicide attempts after killing their children, closely related to depressive, altruistic and acute psychotic behavior (Friedman & Resnick, 2007).

The focus of this article is on two different case studies that involve a father (Case 1) and a mother (Case 2) respectively, who stabbed to death their children, and both had at least one interaction with a mental health professional some years before the filicide, complaining of symptoms consistent with a mood disorder. In case 2, the mother attempted suicide after murdering her daughter.

Both perpetrators were admitted to a psychiatric hospital for further evaluations. The public prosecutor required a forensic psychiatry assessment of their mental condition to assess their criminal liability and responsibility. Both perpetrators were experiencing significant stressful life events such as socially isolation, economic difficulties and fear for the future. A delusional atmosphere, characterised by "delirious altruism" circumstances, was crucial in the causation of the criminal behaviour.

Case study 1: Altruistic Paternal Filicide

The first case concerns a 70-year-old father who fatally injured his adult son with a 30 cm long kitchen knife. An external and internal medical examination confirmed multiple sharp wounds to the chest and abdomen of the young man, who had suffered from cerebral palsy from birth. His mother, who suffered from schizophrenia and had considered an abortion in early pregnancy, left her husband and son as she was unable to care for the child and meet his special needs. Father and son had lived alone ever since, forming an intense symbiotic relationship of co-dependency ("my son was my idol"); they seemed inseparable. The father's psychiatric history revealed that six years before the filicide he had been struggling with anxiety, apathy, early waking and weight loss. He was admitted to a private hospital and had to place his son in a facility for disabled people where he suspected his son had been abused. Months before the fatal act, the man began to develop renewed hypochondriacal symptoms and was concerned not only about his physical and mental health, but also about the fate of his son ("my concern was that if I became depressed again, I would have to seek help from social workers who would place my son in an institution... I felt like I was losing my strength, but I did not want to leave my son with people who didn't understand his needs).

After killing his son, the man underwent psychiatric evaluations. During the interview, he was emotionally detached from the psychiatrist conducting the examination and showed rigid facial expressions, although his memory seemed to be preserved. Critical and judgmental abilities appeared superficial and fluctuating. His formal thinking was stable (without tangentiality, derailment, illogic, etc.); his speech was monotonous but characterised by internal coherence and appropriate language. The content of his thoughts was strongly focused on what was happening. No illusions or hallucinations occurred; however, some ideas of ruin and inadequacy, a sense of self-depreciation and feelings of guilt could be traced back to the time of the event. He showed a depressive mood, accompanied by emotional closure and demotivation. Basic instincts appeared to be preserved and there was a modest awareness of disorder. In relation to the circumstances of the fatal event, he reported that he felt anxiety when thinking about the need to admit his son to another health care facility where «he was sure» his son would be treated badly, which is why he was desperate to save him ("my poor child must be saved…. They would take him away from me, the only person who could alleviate his suffering…. he looked at me with his sweet eyes, I was both mother and father to him, and I had fought to bring him home... The thoughts that day were the usual ones, that I no longer had the strength to care for him, that I would no longer see him and that the only one who could help him was me…so he closed his eyes, I saw a catastrophic scenario... I wanted him to die because I didn't want him to be in pain"). According to the clinical data and the study of behavioural responses, the man suffered from a recurrent major depressive disorder with psychotic features, the content of which was consistent with the typical depressive themes of inadequacy and existential «ruin» affecting his disabled son.

Case study 2: Maternal Filicide

A middle-aged woman was arrested after murdering her pre-school aged daughter with a knife and attempting to take her own life at the same time. In the past, her GP had recommended that she seek psychiatric treatment for her depressive mood, severe anxiety and insomnia ("Before pregnancy, I spent several nights without sleep...". I remembered a dead pigeon on the balcony and thought it was a warning sign of someone who wanted to kill my husband"). During other similar episodes, she showed feelings of loneliness, emotional distance from her family and conflicts with her husband and mother-in-law. The psychiatric interview also revealed that there had been a mood disorder and hospitalisation in the family. The woman deliberately discontinued the prescribed antidepressants. A year before the filicide, thoughts of persecution and referral reappeared, adding to the pressure of overwhelming fatigue associated with work and family commitments. The main paranoid concern of the woman was about her little daughter being kidnapped by her husband, prior to a possible separation ("*I was upset with my husband, I wanted to break up, I have been always arguing with my family in-law... I was tired... I thought my husband was a spy. I feared for my little girl that she would be left without her mother, because I was worried that they would kill me*"). These symptoms occurred in the context of a recurrent depressive episode that required close psychiatric monitoring at home and the prescription of antipsychotics (e.g. risperidone). After a few months, the symptoms gradually improved and the persecutory ideation disappeared, while the mood stabilised more slowly and the woman discontinued the medication herself as she complained of its side effects. Outside the acute episodes, the woman showed good family and work planning and an appropriate relationship with her husband, which was, however, sometimes conflictual. Another strong ambivalent theme was the desire for a new pregnancy. This desire, together with a significant sensitivity to side effects, certainly influenced the difficulties of pharmacological compliance.

On admission to hospital for initial assessment after the filicide, the woman appeared particularly distressed and showed great emotional suffering to the extent that she revealed to the psychiatrist that she was convinced that her daughter had been sexually abused because the daughter panted as if simulating an orgasm while she was cleaning her ("The night before I was scared, I thought that they had kidnapped my little girl at school, tortured her and then raped her. So I took the kitchen knife, stabbed her and then wounded myself five times in the chest and slit my wrists... I did not want to survive my daughter"). During the psychiatric interview, formal changes in thinking occurred with lapses and lax associative links. A story of sexual abuse in her own childhood surfaced ("when I was younger and my mother was hospitalized, I was left alone with a teenage girl who touched me…. because of this I always looked after my daughter myself").

The woman first showed an almost indifferent attitude, then sadness and grief to a point where a feeling of distress prevailed. The facial expressions seemed rigid, the speech slow and monotonous. There were no structured delusions, instead there were ideas of harm, guilt and persecution, presumably similar to those at the time of the event ("That night I was sleepless and thought I had to end her suffering, now I think I should have taken her to the doctor"), as well as withdrawal and apathy. The basic instincts seemed to have remained intact, even if there were sometimes persistent ideas of death ("I never thought of taking my little girl's life, the idea was to die together…. I only ever lived for my little girl"). A Rorschach test was administered, which revealed unstable formal thought patterns with superficial associative connections and poor critical judgement. Their ego functions failed especially when the affective and instinctive spheres were intensely engaged, which is an expression of deep emotional distress. In fact, the control of emotions was particularly problematic for the patient (T.R.I.1; T.R.I.2): affectivity it was very

intensely stimulated and she seemed unstable and unable to control emotions.

Discussion

The deliberate killing of a child by their parents in the form of neonaticide, infanticide and filicide is one of the most dramatic manifestations of interpersonal family violence (Milia & Noonan, 2022). Filicide, which is used here as an overarching term to describe this lethal violence, is a complex and cross-cultural phenomenon that can be found in all historical periods. There are many examples today: in sub-Saharan Africa, some children have been subjected to abusive practices such as witchcraft - violence that can lead to filicide - because of their unusual appearance (albinism), deviant behaviour or disability (Agazue, 2021). Several studies have investigated the motivations, dynamics, psychopathological aspects and sociodemographic factors underlying filicide, despite the methodological and ethical difficulties associated with this type of research (Loughnan & O'Connor, 2023; Hellen et al, 2023). The available classification systems represent an attempt to map the risk factors for filicide, which can contribute to early detection and the implementation of prevention strategies. However, they are not free from limitations, such as the fact that they are not universally recognised, are too descriptive and overlap (Putkonen et al, 2016). For example, the social and psychopathological backgrounds involved in infanticide are largely different from those underlying neonaticide and infanticide. For example, mothers who commit neonaticide are usually unmarried, younger than 25, less likely to suffer from psychiatric disorders, do not have suicidal thoughts after the act of violence, often deny or conceal an unwanted pregnancy and most newborns are born outside a medical facility (Galante et al, 2024; Krischer et al, 2007; Naviaux et al, 2020). On the contrary, multiple genetic, hormonal and psychosocial factors associated with the postpartum period lead to a 1-4% risk of infanticide in women with postpartum psychosis, which, if left untreated, is often associated with suicide attempts (Feingold & Lewis, 2024; Martini et al, 2019). Mothers who commit infanticide tend to be older, married, more educated and generally more likely to experience severe mental health problems in their lifetime (Lewis & Bunce, 2003).

Filicide has traditionally been seen as a crime committed by mothers rather than fathers, which has led to academic research focusing more on this aspect (Raymond et al, 2021; Giacchetti et al, 2023), but more recent studies have shown a similar proportion of male perpetrators (Myers et al, 2021), highlighting some similarities and differences (Temrin, 2024). A study of 77 paternal infanticides in Quebec over a 10-year period (Bourget & Gagné, 2005) showed that: (1) fathers tend to use more violent methods of killing (beating, shooting, and especially stabbing), while mothers are more likely to drown, suffocate, poison, or defenestrate their victims; (2) filicidal fathers are older than filicidal mothers; (3) the proportion of mothers who kill younger children is higher than that of fathers who kill older children;(4) fathers are more likely to be motivated by jealousy, revenge or retaliation (Putkonen et al, 2011); (5) filicidal fathers are more likely to have a history of violence towards their children, and death by lethal abuse may be seen as the result of an impulsive act; (6) fathers are more likely to commit suicide after killing their children (Dawson, 2018, pp 1961–2011; Liem & Koenraadt 2008).

Some of these features were found in the cases presented in this study, regarding the age of perpetrators (older age for the father and younger age for the mother). Contrary to what is mostly reported in literature, both parents in our cases used violent active methods of killing, which might be explained by the attempt of shortening their children suffering. Only the mother attempted suicide.

The public perception of a possible link between mental illness and violence is reinforced by social media, which adds to the widespread dilemma of «mad» or «bad» (Podlogar et al, 2018)? However, findings from numerous studies suggest that parental psychopathology plays a major role in filicide (Flynn, 2013). Psychiatric disorders represent an important risk factor for interpersonal and family violence, compared to other variables such as attachment style or socioeconomic stressors, which are likely to have cumulative interactions in filicide (Giacchetti et al, 2019). In maternal filicide, for example, a history of child abuse, traumatic experiences in early childhood and severe couple conflict are often identified as risk factors that have a significant impact on the event (Barone & Carone, 2021; Vileisis & Laufer, 2024). In paternal filicide, the common factors contributing to the escalation of violence are precarious financial circumstances, imminent separation or divorce of the couple and fear of separation, together with a sense of personal inadequacy in relation to parenting, which is often reported in men (Palermo, 2002). In both maternal and paternal filicide, social isolation or inadequate family and social support at the time of filicide is reported (Barone et al, 2014; Shelton & Hoffer, 2017). As described in our *case study 1*, the father was abandoned by his wife, and the responsibility of caring for his son, who was suffering from a serious illness, lead to a symbiotic and dependent relationship with his son, and likely placed such an overwhelming existential burden on him. The same bond can be seen in case study 2, where an ambivalent relationship with her husband, as well as severe disagreements with both the mother's family of origin and her in-laws, caused the mother to collapse from an unbearable sense of despair. Negative and traumatic childhood experiences surfaced, which had certainly affected her personality development.

According to the Bourget and Bradford (1990), the category of *pathological filicide* refers to cases in which the perpetrator most likely suffers from a major psychiatric illness, and it is likely that the violence is associated with a DSM-IV major Axis I mental illness at the time of the

filicide, especially major depressive disorder, schizophrenia and psychotic disturbances (Resnick, 1969). However, evidence is so scant that it is difficult to identify a specific type of psychiatric disorder that increases the likelihood of the occurrence of filicide. Often fathers have been found to be less often psychotic compared to mothers (Eriksson et al, 2014). Resnick found that schizophrenia occurred more often in maternal offenders (Stanton & Wouldes, 2000) and that depression with psychotic features was present more than twice as often in filicidal mothers (71%) than in fathers (33%) (Liem & Koenraadt, 2008). These results were partially supported by a recent review in which evidence of depression or depressive symptoms was found in 70% of the women and evidence of a history of depressive illness was found in 50% of the fathers (Friedman et al, 2005). This finding is rather interesting as being counterintuitive because compared to other psychiatric disorders, research on the association between depression and violence is still limited (Whiting et al, 2021). Despite the fact that numerous researchers have proposed standardised evaluation models, available tools are still limited and their use in the assessment of the likelihood of violence in the presence of a mental disorder is still discretionary (Zara, 2016; Zara & Farrington, 2016). In the forensic field, the most widely used assessment instruments are the Minnesota Multiphasic Personality Inventory (MMPI) and the Rorschach but considering the primary role of social stressors influencing filicide, structured interviews can help guide professionals through the contextualization of the event (Zara & Freilone 2023; Giacco et al, 2023). Bramante (2023) presented the first case control study of filicide/infanticide using the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) and the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II). All women in the late filicide subgroup suffered depressive symptoms at the time of the event (Bramante & Di Florio, 2023). Personality disorders, particularly borderline personality disorder, were also frequently seen in both men and women and may represent a diathesis of vulnerability during the offspring's growth leading to the development of depressive episodes.

In another study carried out in Quebec (Bourget & Gagné, 2002) almost half of perpetrators of filicide, mostly involving older children (aged 4–15 years), reported the highest frequency of previous mental health contacts. Surprisingly Shelton and colleagues (2015) in their study found that 72% of the women who committed filicide had no specific diagnosis of a mental disorder before the crime.

Relevant features of filicide in the context of major mental illness are likely to include disorganised thinking and unstable mental state, whose main reasons for engaging in filicide were represented by (delusion-based) mercy killing (Moodley, 2019).

Altruistic filicide, according to Resnick's (1969) definition, is committed "out of love" and can be divided into two subgroups: *associated with suicide*, in which suicidal parents see their children as an extension of themselves and may believe that their offsprings suffer the same misery as they do (D'Argenio et al, 2013); *filicide to relieve or prevent suffering*, in which parents believe they are acting in the best interest of their children to relieve a suffering, real or imagined (based on a delusional perception), rather than harming them (Resnick, 2016). Severe depression, even without psychotic features are likely to distort their thinking (Ciani & Fontanesi, 2012). Melancholic filicides, often accompanied by suicidal actions, are a notorious risk in severely depressed parents (Brockington, 2017).

Dyadic death, in which the parent takes their own life typically within 24 hours after the filicide, are relatively rare: the global rate ranges between 0.02 and 0.46 per 100,000 per year (Ateriya et al, 2019). Fathers are almost twice as likely to complete suicide after filicide which is facilitated by their use of more lethal methods (Friedman et al, 2008); approximately 40% to 60% of fathers while only 16% to 29% of the mothers are reported (Shields et al, 2015). Both altruistic and acute psychotic behaviour are closely related to filicide-suicide cases (Declercq et al, 2018). When the victim is between ages 1 and 5 (preschool children), the main psychopathological motivation behind filicide is connected to the so-called *delirious altruism*, where the parent (usually the mother) perceives the child as solely dependent on her, and death becomes the only way to escape from a world full of pain and suffering (Rougé-Maillart et al, 2005; Coorg & Tournay, 2013).

In both case studies described here, "altruistic" delusional thinking and behaviour was evident, as they expressed their concern for their children with the perception that they were unsafe, too weak to live, or in danger of being taken away.

In case 1, the act of violence was a symptom of a mental disorder, with the consequences being viewed completely uncritically ("I went into the kitchen like a robot... I felt lost, scared… I didn't want to kill him or lose him"), in a father whose stress and frustration may have led to filicide to relieve him of his constant suffering. At the time of the filicide, he perceived a profound change in reality, with growing anxiety about his son's future and inappropriate depressive themes concerning his exclusive relationship with his child.

In case 2, anxiety, dependency characteristics and low self-esteem were mainly observed in the mother, and there seems to have been a sudden transformation of meaning into a depressive delusion that linked in a psychotic dimension the alleged sexual violence suffered by her young daughter with a solution to her suffering: dying as redemption and at the same time as atonement for the guilt of not having sufficiently protected her child. In the two filicides described here, the parents used knives because they were easy to find at home, in the living room where the parent and the child spent most of their time together.

In both case studies, the father and the mother had contact with the healthcare system prior to the filicide, but their symptoms were intermittent. In the case of the

woman, it should be emphasised that she was receiving treatment, although she desperately tried to hide this to avoid disappointing her family. This is an important aspect which still affects adherence to treatment related to the stigmatised view associated with psychiatric patients.

Conclusion

Filicide requires a multidisciplinary approach (Burrascano et al, 2024) to be understood and treated given the multiple social, relational and psychopathological aspects (Sorge et al, 2022) that contribute to the complexity of the problem. Both maternal and paternal filicide motives can often be altruistic, because in the eyes of a parent suffering from psychiatric problems, killing children means saving them from the cruel world. Therefore, the categories of altruism and mental illness can be considered as a single category (Shelton & Hoffer, 2017). Health and social care professionals should be prepared and sensitive enough to recognise the signs of escalating stress or the severity of mental illness, especially when delusional thoughts about children, suicidal thoughts or self-harm occur.

Conflict of interest

The authors declare that they have no conflict of interest.

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Juvenile recidivism and comorbid mental health disorders: a case report and literature review

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Abstract

Juvenile recidivism remains a critical concern within the justice system, particularly when intertwined with mental health comorbidities. Adolescence represents a sensitive developmental period during which untreated psychiatric disorders, neurocognitive deficits, and systemic failures contribute to persistent offending. This article explores the complex interplay between mental health disorders and recidivism through the case of Filippo, a young offender with a longstanding criminal history and multiple psychiatric comorbidities, alongside a systematic review of relevant literature. Filippo's case exemplifies how untreated mental health conditions and systemic challenges contribute to juvenile recidivism. Effective strategies must integrate comprehensive mental health care, forensic consistency, and developmental support within the juvenile justice framework to mitigate recidivism and improve long-term outcomes.

Keywords: juvenile recidivism, mental health, ADHD, conduct disorder, antisocial personality disorder, forensic psychiatry, youth justice system

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Juvenile recidivism and comorbid mental health disorders: a case report and literature review

Introduction

Persistent or repeat offenders, often categorized as recidivists, exhibit long criminal trajectories that frequently begin in adolescence and involve multiple engagement in similar types of offenses (Sabatello, 2010). Recidivism, a critical issue within the study of criminal behavior, refers to the tendency of individuals to reoffend following punishment. Psychological mechanisms underlying this pattern of behavior are commonly attributed to impaired executive functions, such as deficits in problem-solving, impulse control, and the ability to plan actions and thoughts effectively (Sabatello, 2010). Understanding why individuals persist in criminal behaviors despite judicial interventions remains a key area of inquiry.

The recurrence of recidivism has been linked to numerous sociodemographic factors, including gender (Wang et al., 2019), educational attainment (Steurer & Smith, 2003), substance use problems (Håkansson & Berglund, 2012), and the nature of offenses committed (Yukhnenko et al., 2020). Socioeconomic challenges, such as financial instability post-release (Beek et al., 2023), limited employment opportunities and unstable work histories (Ramakers et al, 2017), alongside neighborhood environments (Kubrin & Stewart, 2006), further exacerbate the risk of reoffending. Additionally, previous research indicates that both youth and adult offenders tend to exhibit lower emotional intelligence (EI) traits compared to non-offenders (Hayes & Reilly, 2013). Empirical evidence further supports a link between low emotional intelligence and recidivism. For instance, Stephens and Nel (2014) observed that most offenders demonstrate poor EI traits, while Kimonis et al. (2016) found that among juvenile offenders, recidivism was associated with deficits in empathy and emotional regulation—key characteristics of low EI. These deficits often manifest as a lack of guilt, poor emotional expression, and a reduced capacity for empathy. Moreover, Wang et al. (2019) noted that while emotional intelligence did not directly predict recidivism, it could influence it indirectly through childhood trauma as a mediating factor.

A meta-analysis conducted by Cottle, Lee, and Heilbrun (2001) identified prior criminal history as the strongest predictor of juvenile recidivism, among 30 factors categorized into eight domains, including demographics, family dynamics, substance use, clinical indicators, and formal risk assessments. Additional significant predictors included dysfunctional family environments, problematic peer associations, ineffective leisure time management, and mental health issues of lesser severity. A meta-analysis examined the relationship between recidivism and mental disorders in juvenile offenders (Wibbelink et al., 2017). The study found a significant overall association, particularly with externalizing disorders such as ADHD and conduct disorder, which were linked to higher recidivism rates. In contrast, internalizing disorders often did not increase the risk of recidivism and, in some cases, had a protective effect, especially among females. Additionally, the study highlighted that the presence of comorbid internalizing and externalizing disorders significantly heightened recidivism risks, emphasizing the complexity of mental health factors in predicting juvenile delinquency outcomes. Notably, this contrasts with earlier findings by Cottle et al. (2001), which linked non-severe pathology, such as anxiety and distress symptoms, to higher recidivism risk—a discrepancy likely influenced by differing inclusion criteria and effect size assessments.

The complex nature of recidivism highlights the need for further investigation into the link between mental health and repeat offending during adolescence. This stage of development is particularly sensitive, and youth involved in the juvenile justice system often present with dynamic mental health risk factors that may be responsive to intervention. Examining these relationships through case-based and thematic reviews can offer deeper insights into the role of mental health disorders, trauma histories, and deficits in emotional regulation in recidivism. Such an approach underscores the importance of therapeutic strategies that address both individual psychological vulnerabilities and broader systemic challenges to effectively reduce the risk of reoffending.

Methods

A systematic literature search was carried out using PubMed, Scopus, and PsycINFO with the following search strategy: («adolescent» OR «youth» OR «teen*» OR «young people» OR «juvenile») AND («mental health» OR «psychological wellbeing» OR «psychiatric disorders» OR «mental illness») AND («recidivism» OR «reoffending» OR «repeat offending»). The reference lists of the retrieved articles were also reviewed to identify additional studies meeting the inclusion criteria. Only original research articles, published between 2014 and 2024, that specifically examined the relationship between adolescence, mental health and recidivism were included. Studies were excluded if they were meta-analyses, psychosocial interventions, clinical trials, imaging protocols, literature reviews, or not available in English. A total of 4,362 arti-

cles were initially identified. After duplicates were removed, 4,233 articles remained. Screening of titles and abstracts narrowed this number to 523 articles. Following a full-text review, 8 articles were included in the final analysis (Table 1). A qualitative and thematic analysis of the findings was conducted, focusing on recidivism prevalence, the presence of mental health disorders, and the specific risks of recidivism associated with various mental health conditions in juvenile delinquency. Although the process was conducted in a double-blind manner, a systematic approach was employed to identify publications from the last ten years that explored the link between mental health and recidivism in juvenile delinquency.

Table 1

Title	Year	Aim	Population	Country
Tolou-Shams et al.	2023	To examine the association between psychiatric symptoms, substance-related problems, and recidivism among youth.	361 justice-involved youth aged 12–18	United States
Baglivo et al.	2017	To explore the role of parental mental health and neuropsychological deficits in juvenile recidivism.	Over 11,000 male juvenile offenders	United States
Barrett et al.	2014	To analyze the impact of early adverse experiences and mental health on juvenile delinquency and recidivism.	99,602 youth processed by juvenile courts	United States
Edberg et al.	2022	To assess recidivism rates among offenders with and without intellectual disabilities.	3,365 offenders sentenced to forensic care	Sweden
Kim et al.	2017	To estimate psychiatric disorder prevalence and its link to repeat offending among male juvenile detainees.	173 juvenile detainees	South Korea
Van der Put et al.	2016	To examine differences in recidivism rates and risk/protective factors for offenders with and without ADHD.	Juvenile offenders with AD(H)D (n = 1,348), with both AD(H)D and conduct problems (n = 933), and without AD(H)D or conduct problems (n = 2,180)	Netherlands
Wojciechowski	2021	To analyze the impact of major depressive disorder on recidivism among juvenile offenders.	1,354 juvenile offenders across the 84 months following adjudication for a serious offense.	United States
Poyraz Fındık et al.	2019	To examine psychiatric diagnoses, comorbidity patterns, and risk factors related to recidivism in juveniles under probation.	55 juveniles under probation aged 14–18	Turkey

Literature Review

Findings from multiple studies emphasize the complex nature of juvenile recidivism and the critical need for targeted interventions that address underlying mental health, behavioral, and systemic challenges. Tolou-Shams et al. (2023) reported that one-third of first-time justice-involved youth reoffended within 24 months, with externalizing symptoms and alcohol-related issues being strong predictors of recidivism. These findings highlight the importance of prioritizing externalizing behaviors as treatment targets during a youth's initial contact with the justice system. Similarly, Baglivo et al. (2017) identified a strong connection between parental mental health and substance abuse problems and youth neurocognitive deficits, such as ADHD and conduct disorder (CD), noting that ADHD significantly predicted recidivism within one year.

Furthermore, effortful control and negative emotionality also influenced recidivism, aligning with theories of emotional regulation and delinquency. Using structural equation modeling—which integrated both measurement and structural components and demonstrated a good fit with the data—three key findings emerged. First, parental substance abuse and mental health problems were significantly associated with youth ADHD diagnoses and negative emotionality but were not linked to CD diagnoses or effortful control. Second, ADHD was associated with recidivism within one year of treatment completion, whereas CD was not. Third, effortful control and negative emotionality both showed significant relationships with recidivism: effortful control was inversely related, while negative emotionality was positively associated, consistent with theoretical expectations. Previous studies have shown that both adverse family environments and school challenges predict juvenile reoffending (Barrett et al., 2014). Additionally, preexisting mental health issues can further exacerbate recidivism (Barrett et al., 2014). This under-

scores the multifaceted nature of juvenile offending, where individual psychological factors interact with environmental and developmental challenges. Early, comprehensive interventions that address mental health, familial adversity, and educational disruptions are crucial for breaking this cycle. Research in other contexts also highlights the high prevalence of psychiatric comorbidities among juvenile offenders. For example, Poyraz Fındık et al. (2019) reported elevated rates of ADHD, depression, and anxiety among justice-involved youth in Turkey, with comorbid internalizing and externalizing disorders significantly predicting recidivism. Approximately two-thirds of the participants were diagnosed with at least one psychiatric disorder, aligning with previous research indicating prevalence rates between 40% and 90% among delinquent juveniles, depending on their position within the justice system (e.g., detention or probation). Probation-based studies, like this one, generally report lower rates of psychiatric disorders compared to detention-based populations, though psychiatric intervention rates remain notably low. The study also observed an implicit relationship between depression and delinquency, though causality remains unclear. Recidivists exhibited higher rates of depressive disorders, comorbid internalizing and externalizing disorders, multiple psychiatric diagnoses, and a greater history of substance use. Notably, having at least one psychiatric diagnosis was the strongest predictor of recidivism. Similarly, Kim et al. (2017) found that alcohol use disorders, conduct disorder, and ADHD were prevalent among juvenile detainees in South Korea, highlighting the importance of identifying and addressing these comorbid conditions. Van der Put (2016) examined recidivism rates, risk and protective factors, and their relationships among juvenile offenders categorized into three groups: ADHD-only, ADHD with conduct problems (ADHD-comorbid), and a comparison group without ADHD or conduct problems. The study revealed significant differences in background characteristics and mental health issues across these groups. Offenders in both ADHD groups were predominantly male and Caucasian and were generally younger than those in the comparison group. Mental health difficulties, including learning disabilities, intellectual disabilities, and other psychiatric conditions, were most prevalent in the ADHD-comorbid group, followed by the ADHD-only group, and least common in the comparison group. Notably, juveniles with ADHD and co-occurring conduct problems faced higher risks of recidivism than peers without such diagnoses (van der Put et al., 2017). This subgroup exhibited the fewest protective factors and the highest risk levels across multiple domains, underscoring the need for tailored interventions to address their unique vulnerabilities.

Additionally, studies examining intellectual disabilities (ID) revealed nuanced relationships with recidivism. While Edberg et al. (2022) found lower reoffense rates among individuals with ID, the presence of ADHD comorbidities significantly increased recidivism risks. In contrast, Van der Put et al. (2014) highlighted the role of skills and moral judgment, suggesting that juveniles with less severe intellectual impairments may have higher offending rates due to greater behavioral capacity. Similarly, Wojciechowski (2021) identified Major Depressive Disorder (MDD) as a long-term predictor of recidivism, particularly as youth transition into emerging adulthood. Overall, these findings reflect the complex interplay between mental health, neurocognitive deficits, and environmental influences in driving juvenile recidivism. Effective strategies must include early screening, targeted mental health treatment, and interventions addressing family adversity, substance use, and educational challenges to reduce reoffending and improve long-term outcomes.

Case Report

Filippo (a pseudonym) first came under forensic observation in 2019 at the age of 15. By 19, he had accumulated multiple ongoing criminal proceedings across nine different Juvenile Courts in Italy. His extensive criminal history has led to several periods of detention, first in juvenile facilities and later in prison. Filippo's legal situation is particularly severe, as his criminal behavior began at a very young age—before the age of criminal responsibility—and he now faces multiple trials for offenses committed after reaching legal accountability. His offenses include attempted theft, theft, burglary, purse snatching, aggravated theft, aggravated cruelty to animals, property damage, providing false statements, resisting, and obstructing police, and receiving stolen goods. Notably, his parents also have significant criminal backgrounds. In 2010, Filippo underwent a child psychiatric evaluation, which identified sensorineural hearing loss along with hyperactivity, inattention, and impulsivity, leading to a diagnosis of attention deficit hyperactivity disorder (ADHD). By October 2013, another psychiatric assessment described his condition as resembling oppositional defiant disorder in a child with profound hearing impairment and a prior ADHD diagnosis. Around the same time, his psychotherapist observed symptoms of hyperactivity with attention deficit, separation anxiety disorder with depressive features, and severe bilateral hearing loss. Filippo also experienced nocturnal enuresis and significant school absenteeism. In 2016, a psychodiagnostic evaluation identified symptoms including hyperactivity, impulsivity, distractibility, elopement behaviors, kleptomania, multiple offenses (e.g., theft, assault, property damage), cruelty toward animals, and severe rule violations both at school and at home. Although he attended school part-time, Filippo struggled with adaptation and learning difficulties due to cognitive and linguistic deficits. His condition was confirmed as ADHD, oppositional defiant disorder, and conduct disorder.

By July 2019, Filippo underwent his first forensic psy-

chiatric evaluation, which identified mild-to-moderate intellectual disability, significant language impairment, confabulatory tendencies, and symptoms of delusions and hallucinations. He was subsequently diagnosed with childhood-onset schizophrenia and deemed incapable of understanding and intent. The evaluation recommended urgent psychiatric hospitalization for treatment and further assessment.

In June 2020, a forensic evaluation ruled out impaired understanding and intent. A psychometric assessment using the WAIS-II revealed an IQ of 65, while the Z-test indicated adequate thought productivity and good contact with reality, with no evidence of confabulation. By 2021, the juvenile prison medical team reported profound bilateral sensorineural hearing loss, severe childhood-onset conduct disorder, combined ADHD, and mild affective disability. Separation anxiety had diminished.

In February 2022, a community educational team monitoring Filippo under supervised liberty reported significant challenges, including oppositional behavior, hyperactivity, sensory limitations due to hearing loss, interpretative thinking, anger, provocative behaviors, and manipulative tendencies. A subsequent neuropsychiatric evaluation in March 2022 diagnosed him with hyperkinetic conduct disorder, intellectual impairment due to socio-cultural disadvantage, and persistent difficulties in language comprehension and production linked to hearing loss. Later in March 2022, a third forensic evaluation identified chronic paranoid psychosis (schizophrenic paranoia) with recent psychotic decompensation. Filippo was deemed completely incapable of understanding or intent due to pervasive psychosis and delusional ideation. However, by July 2022, another evaluation diagnosed antisocial personality disorder, concluding that his capacity for understanding and intent was preserved. In December 2022, a fifth assessment diagnosed moderate intellectual disability and severe childhood-onset conduct disorder, determining that while Filippo's capacity for intent was severely diminished, his understanding remained intact. The evaluation also noted a high risk to society. By April 2023, at 19 years of age, a forensic evaluation confirmed a diagnosis of severe childhood-onset conduct disorder evolving into antisocial personality disorder in adulthood. The report emphasized impairments in volitional capacity while preserving understanding. Another concurrent evaluation reaffirmed severe antisocial personality disorder, mild-to-moderate intellectual disability, and longstanding ADHD—conditions persisting since childhood. One year later, while imprisoned in an adult jail, he died, possibly by suicide.

Filippo's troubled personal history highlights repeated failures of intervention within the juvenile justice system. His longstanding antisocial behavior and disregard for social norms began in childhood and intensified over time, primarily manifesting as persistent impulsivity and theft. Although he claimed to experience auditory hallucinations compelling him to steal, forensic assessments found no psychopathological evidence to support these claims.

According to DSM-5 criteria, antisocial personality disorder is characterized by a chronic disregard for the rights of others, failure to conform to social norms, impulsivity, irritability, irresponsibility, and lack of remorse. Filippo meets these criteria, having exhibited systematic violations of social boundaries, hyperactivity, and impulsivity—hallmarks of untreated adult ADHD and antisocial personality disorder.

Forensic evaluations conducted between July 2019 and April 2023 indicate a progression from severe conduct disorder in adolescence to a diagnosis of antisocial personality disorder in adulthood. Filippo's case highlights his high risk of reoffending and the challenges posed by his persistent antisocial tendencies, impulsivity, and hyperactivity—reflecting both his personality disorder and untreated ADHD. This case underscores significant concerns regarding juvenile justice management and the repeated failure to effectively address Filippo's complex needs.

Discussion

Filippo's case highlights many issues discussed in the literature on juvenile justice, mental health, and recidivism. His extensive criminal record, which began at a young age and persisted into adulthood, underscores the challenges of managing complex psychiatric and behavioral needs within the juvenile justice system. Filippo exhibited multiple comorbid conditions, including ADHD, intellectual disability, conduct disorder, and later, antisocial personality disorder. Studies (Baglivo et al., 2017; Kim et al., 2017) have shown that comorbid externalizing disorders, such as ADHD and conduct disorder, significantly increase the risk of recidivism. Van der Put et al. (2016, 2017) emphasize that juveniles with ADHD and co-occurring conduct problems face the highest risk, as they often lack protective factors and exhibit elevated risk levels across various domains. Filippo's trajectory aligns with this profile, as his early behavioral problems were largely untreated and intensified over time. His persistent impulsivity, hyperactivity, and aggression reflect untreated neurodevelopmental and psychiatric disorders. Research underscores the importance of addressing mental health needs promptly, as delays in intervention can lead to worse outcomes (Tolou-Shams et al., 2023; Barrett, 2014). Despite multiple psychiatric assessments, Filippo did not receive consistent interventions tailored to his complex comorbidities, resulting in escalating criminal behaviors and repeated contact with the justice system. Efforts were made to integrate him into therapeutic communities; however, he repeatedly escaped, leading to three incarcerations in juvenile detention and two in adult prisons. This highlights a fundamental issue within the juvenile justice system: the structural legacy of youth justice frameworks that remain misaligned with developmental evidence (Rice et al., 2024). Research indicates that establishing criminal responsibility around the age of 14 is problem-

atic, as the transition from childhood to adulthood extends into the third decade of life (Rice et al., 2024). Young adults with significant mental health challenges, like Filippo, are often detained in adult prisons, where they rarely receive developmentally appropriate or timely care. The failure to adequately address the mental health needs of justice-involved youth can disrupt critical developmental processes, including the formation of prosocial relationships, access to social support, and pursuit of educational and employment opportunities. Consequently, this increases the risk of persistent antisocial behaviors, marginalization, and additional social and economic burdens. Furthermore, research indicates that psychiatric comorbidities, particularly among detained youth, remain underdiagnosed and undertreated (Tugce Poyraz Fındık et al., 2019). Filippo's case also reflects adverse family dynamics, as his parents have significant criminal backgrounds. Baglivo et al. (2017) and Barrett (2014) highlight the strong association between parental mental health and substance abuse issues and youth behavioral problems, including conduct disorder. However, Filippo's case presents an additional challenge: the complexity of treatment from a forensic perspective. Filippo underwent multiple forensic evaluations, sometimes even within the same period, over a few years. Notably, in the initial assessments, the diagnostic hypotheses varied significantly from those proposed in subsequent evaluations. Early evaluations suggested a psychotic core, leading to a diagnosis of chronic paranoid psychosis. Over time, this evolved into a recognition of conduct disorder, which later culminated in a diagnosis of antisocial personality disorder comorbid with ADHD and intellectual disability. This type of diagnostic disagreement is common in forensic examinations. Recent research highlights that expert agreement is often limited, with significant discrepancies in the assessment of psychiatric disorders in criminal cases (Miller et al., 2012; Neal & Grisso, 2014). Further studies have also drawn attention to the poor quality of psychiatric reports submitted to criminal courts and the frequent lack of concordance between examiners evaluating the same case (Fuger et al., 2014; Kacperska et al., 2016). Diagnostic challenges become even more pronounced in the context of juvenile delinquency. From a developmental perspective, adolescence has long been recognized as a particularly challenging stage in terms of behavioral difficulties.

This study has several limitations. The articles included in this systematic review were obtained from three academic online databases, PubMed, PsychInfo and Scopus. Consequently, our findings are restricted to peer-reviewed articles indexed in these databases between 2014 and 2024. The exclusive use of peer-reviewed literature may have led to the omission of grey literature, government reports, legal review papers, and other relevant commentaries on juvenile delinquency, potentially introducing publication bias. Another limitation concerns the literature analysis: no specific qualitative strategy was adopted, and the results of the studies included in the review were reported as they were.

In conclusion, many in Italy believe that substantial progress is still required to establish a juvenile justice system that effectively addresses the needs of minors. On a global scale, regulatory frameworks often prove inadequate, failing to accommodate the age-specific needs of young individuals. Furthermore, the limited availability of suitable services and facilities, combined with a shortage of specialized personnel, hinders the essential training and supervision needed to support this vulnerable group.

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From childhood ADHD to adult offending: a case report and a brief review

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Abstract

Attention-Deficit/Hyperactivity Disorder (ADHD) is a prevalent neurodevelopmental disorder affecting approximately 3% of the adult population, characterized by persistent inattention, hyperactivity, and impulsivity. Over the lifespan, ADHD may persist or evolve into more complex psychopathological profiles, particularly when compounded by comorbidities such as substance use disorders or antisocial personality traits. These evolving presentations carry significant implications in forensic psychiatry, especially in the context of violent or impulsive offending.

This case report concerns G.P., a 23-year-old man with a documented history of childhood ADHD and motor tics, who later developed polydrug use and was charged with aggravated attempted homicide against his intimate partner. The violent act occurred following acute intoxication with alcohol and cocaine. Forensic psychiatric evaluation excluded the persistence of ADHD according to DSM-5-TR criteria, as well as any major psychiatric disorder or cognitive impairment. The subject exhibited a structurally immature personality profile, marked by poor emotional regulation, impulsivity, and antisocial traits. Psychodiagnostic testing supported these findings, revealing elevated impulsiveness without evidence of psychosis or major mood disorder.

The case highlights the intricate relationship between neurodevelopmental disorders, personality development, substance misuse, and violent criminal behavior, underscoring its significance for forensic psychiatric practice. Notably, it demonstrates how the clinical presentation of ADHD may evolve over time, with core symptoms potentially diminishing in prominence while comorbid personality and substance use disorders increasingly shape the individual's trajectory.

Keywords: ADHD; violent behavior; emotional regulation; criminal behavior; Forensic psychiatric evaluation

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From childhood ADHD to adult offending: a case report and a brief review

Introduction

Attention-Deficit/Hyperactivity Disorder (ADHD) is a widespread neurodevelopmental disorder affecting approximately 3% of adults globally, characterized by persistent inattention, impulsivity, and hyperactivity that significantly impair daily functioning across social, academic, and occupational domains (Song et al., 2021). In the transition from childhood to adulthood, most individuals with ADHD who were not diagnosed during childhood or adolescence remain undetected, with less than 20% of adults with ADHD receiving an adequate diagnosis or treatment, a situation that contributes to adverse long-term outcomes (Ginsberg et al., 2014).

Attention-Deficit/Hyperactivity Disorder involves neurobiological dysfunctions, especially in the regulation of dopaminergic and noradrenergic systems, along with functional impairments in executive control and attention networks (Biederman, 2005).

These impairments manifest as pervasive functional burdens, including school and work underachievement, worse physical health, and impaired social relations (Arrondo et al., 2023; Harpin et al., 2016). Attention-Deficit/Hyperactivity Disorder significantly heightens the chances of peer victimization during school years, with affected individuals sometimes acting as both victims and aggressors (Fogler et al., 2022).

The disorder's trajectory often intersects with substance use disorders (SUD), which independently exacerbate criminal risk (Friedman, 1998). Attention-Deficit/Hyperactivity Disorder elevates the odds of Substance Use Disorder (SUD), creating a compounding vulnerability for illegal behaviors (Escamilla-Robla et al., 2022).

Individual with ADHD experience a more severe manifestation of addictive disorders, regardless of the presence of other psychiatric comorbidities. Additionally, it is linked to an earlier start of substance use and a heightened risk of poly-dependence (Fatséas et al., 2016).

Comorbidity with SUD significantly raises the risk of conviction and incarceration (Mohr-Jensen et al., 2019; Strada et al. 2021) and co-morbidity of ADHD with SUDs in incarcerated populations is high (Rösler et al., 2004).

Individuals with ADHD exhibit earlier onset of criminal activity, with first arrests occurring at a mean age of 16.9 years - significantly younger than non-ADHD counterparts (De Sanctis et al., 2012). Notably, ADHD is recognized as a significant risk factor for antisocial and delinquent behaviors over the lifespan (Retz et al., 2021). Moreover, longitudinal studies indicate that childhood-onset ADHD, particularly when comorbid with conduct disorder, elevates the likelihood of future antisocial personality development and criminal involvement (Mohr-Jensen & Steinhausen, 2016). Furthermore, meta-analytic data reveal a 2–3 times higher risk of criminal convictions and incarcerations among this population, with ADHD prevalence in prison settings estimated at 20.5%, far exceeding general population rates (Mohr-Jensen et al., 2019).

Behavioral phenotypes further elucidate the association between ADHD and criminal behavior. ADHD-related criminality is strongly linked to reactive aggression - spontaneous, affect-driven responses to provocation - rather than premeditated violence (Retz et al., 2021). This distinction arises from deficits in impulse control and emotional regulation, which may be moderated by protective factors such as an individual's ability to perceive life as understandable and manageable - a quality known as Sense of Coherence. This capacity reduces the connection between ADHD and antisocial behaviours across various criminal types (e.g., violence, property crimes) (Dayan et al., 2022).

Individuals with ADHD are more likely to be involved in certain types of crimes, with patterns that vary by age group and context but consistently involved impulsivity and behavioural dysregulation. Among adult prisoners, violent offenses - including sexual crimes - are strongly associated with ADHD, whereas rates of fraud do not differ significantly between those with and without ADHD (Ziegler et al., 2003) In samples of younger offenders, such as those from a German youth prison with a mean age of 19.5 years, theft is the most common offense, followed by assault or robbery and drug-related crimes (Rösler et al., 2004). Juvenile detention centers also report high rates of robbery, assault, and drug-related offenses, with no significant differences in the types of crimes committed among young detainees based on self-reported ADHD symptomatology (Barra et al., 2022; Turner et al., 2021).

Large-scale register-based epidemiological research further substantiates these trends, revealing elevated rates of substance-related crimes (20.5% in males and 7.9% in females) and violent offenses - encompassing homicide, assault, threat, robbery, arson, and sexual crime (14.7% in males and 15.0% in females) - among those diagnosed with ADHD (Lichtenstein et al., 2012).

These findings collectively indicate that individuals with ADHD are more prone to impulsive and aggressive crimes, particularly when comorbid substance use or conduct disorders are present.

Conversely, inadequate treatment escalates risks; pharmacological interventions like methylphenidate correlate with 30–40% reductions in criminal recidivism and injury rates, underscoring the role of targeted therapies in mitigating outcomes (Mohr-Jensen et al., 2019).

Pharmacological interventions, particularly stimulant medications such as methylphenidate, have been shown to play a significant protective role. Large-scale epidemiological studies consistently demonstrate that appropriate medication substantially reduces the risk of criminal recidivism and injury rates among individuals with ADHD (Lichtenstein et al., 2012), (Mohr-Jensen et al., 2019). Longitudinal evidence indicates that ADHD significantly elevates the risk of antisocial behaviors and criminal involvement throughout development, though offending trajectories show distinct age-dependent patterns. A seminal 30-year prospective study of hyperactive boys with conduct disorder revealed a progressive decline in arrest rates: 59% during ages 18–21, 32% at ages 27–32, and 16% at ages 36–38. Notably, the mean age of desistance (cessation of criminal activity) was 30.1 years (Retz et al., 2021; Satterfield et al., 2007).

Forensic psychiatry faces unique challenges in this context, including heightened vulnerability during police interrogations, fitness-to-stand-trial assessments, and incarceration-related risks (Freckelton, 2020). These findings underscore the importance of targeted pharmacotherapy not only in reducing criminal behaviours but also in mitigating the broader risks associated with impulsivity and inattention in individuals with ADHD.

While some studies attribute antisocial behaviours directly to ADHD symptoms, emerging evidence warns against ignoring comorbidities that may better explain aggression or emotional dysregulation (Modesti et al., 2025). In forensic psychiatry addressing the criminal responsibility of individuals with ADHD who commit offenses, a study specifically examining road crimes identified key psychological variables as risk factors (Escamilla-Robla et al., 2022). Results indicate that antisocial personality disorder and alcohol use disorders, along with hyperactivity, constitute the most significant variables, thereby highlighting the pivotal role of comorbidities in problematic behavior (Escamilla-Robla et al., 2022). Few studies assess the distinct effects of attention deficit versus hyperactivity components or how these components interact with comorbid mental disorders to influence crime risk.

This case report describes the forensic psychiatric evaluation performed on a young man who was diagnosed with ADHD in childhood and subsequently developed polydrug abuse, ultimately committing aggravated attempted homicide against his girlfriend.

Case report

G.P., born in 2001, first entered psychiatric care at the age of eight, following referral by his family pediatrician for marked behavioral and attentional difficulties at home and in school. Initial assessments documented hyperactivity, limited attention span, and motor instability, resulting in disruptive behavior and relational problems.

In March 2010, the local Mental Health Center diagnosed motor tics involving the face and eyes, along with conduct and attention disorders associated with hyperactivity. A treatment plan of psychological therapy and psychoeducational interventions was initiated, with active parental involvement.

Later that year, a specialized neuropsychiatric evaluation confirmed a diagnosis of Tourette syndrome, comorbid with ADHD, and learning disabilities. No pharmacological treatment was prescribed. Over the following years, multidisciplinary interventions addressed persistent difficulties in emotional regulation and impulse control. The last recorded psychiatric contact occurred in 2014.

In adolescence, G.P. exhibited notable behavioral disturbances, culminating in a violent episode at school during which, following a disciplinary reprimand he perceived as unjust, he forcefully kicked and shattered a glass door. This act of impulsive aggression led to his suspension. In the aftermath, he discontinued formal education and began working in the agricultural sector.

At approximately 15 years of age, he initiated use of alcohol and cannabis, escalating to cocaine, with limited awareness of risks.

Upon completing secondary education and earning his high school diploma, G.P. worked for five months in an agricultural cooperative, preparing and packing potato crates, followed by seasonal agricultural labor in crop harvesting and cultivation. He later secured a position in the produce section of a local supermarket, which he maintained for approximately one year, resigning after an interpersonal conflict with a supervisor.

Immediately thereafter, he obtained employment in a factory specializing in fiberglass and plastic-printed materials. Over time, he assumed increasing responsibilities and was offered a permanent contract. He reported high job satisfaction, a positive work environment, and no prior occupational difficulties or absenteeism.

In social contexts, G.P. maintained close ties with a peer group and regularly participated in nightlife events, parties, and informal music gatherings, during which he habitually consumed alcohol and occasionally used cocaine.

In 2019, he began a stable romantic relationship, which represented his primary emotional attachment. During the course of this relationship, alcohol and substance use appeared to be more controlled in the girlfriend's presence, while episodes of greater disinhibition and excessive consumption occurred predominantly when she was absent.

In December 2023, during an evening spent with friends, after consuming alcohol and cocaine, G.P. was involved in a physical altercation and subsequently drove his car into the facade of a bar, causing structural damage. He later reported having only fragmented memories of the episode.

Offense

According to the investigation file, the offender is accused of aggravated attempted homicide against his girlfriend. The offence occurred during a night in June 2024, following a prolonged episode of escalating aggression.

Earlier that evening, after consuming significant quantities of alcohol and cocaine, the offender became acutely agitated during a conversation with a friend, who suggested that his girlfriend was seeing another man. Following receipt of this information, he first vandalized her car, breaking windows and puncturing tires.

After this initial episode, the offender returned home, retrieved two kitchen knives, and then drove back to the victim's residence.

Upon re-entering the home, he forced entry and launched a violent physical assault on the victim, punching, kicking, and pulling her hair in the presence of her family. During this first attack, he inflicted multiple blunt force injuries.

Following a brief interruption, the offender again forced his way inside – this time armed with the knives – and carried out a second, more severe attack, during which he inflicted multiple stab wounds on the victim. The assault resulted in deep incised injuries to the neck and arm, causing profuse hemorrhage, vascular injury, and hypovolemic shock. The victim's condition was initially life-threatening, requiring emergency surgery, transfusions, and intensive care.

In the course of the attack, the victim's mother also sustained blunt force injuries while attempting to intervene. Statements from multiple witnesses – including the victim's mother and brother – as well as video surveillance footage, confirmed the dynamics of the assault and the offender's deliberate use of bladed weapons.

At the time of arrest, the offender was found with minor self-inflicted injuries and presented in a visibly agitated and distressed state. In subsequent wiretapped conversations, he was recorded discussing the incident with family members, revealing efforts to frame the episode as impulsive, triggered by alcohol, drugs, and emotional turmoil, and to deny premeditation as motives.

Forensic Psychiatric Findings

Court-ordered forensic psychiatric evaluation revealed a structurally immature personality organization with prominent antisocial traits, persistent impulsivity, poor internalization of moral reasoning, and limited capacity for emotional regulation. The subject's developmental trajectory, marked by childhood ADHD and tic disorder, evolved into an adult personality profile characterized by disinhibition, emotional lability, and maladaptive coping strategies.

Clinical interviews and observational data excluded the presence of psychotic disorders, major mood syndromes, or cognitive impairments. Thought processes remained reality-oriented, with no evidence of delusional beliefs or perceptual disturbances. Memory and executive functions were preserved.

The psychiatric observation carried out by the prison health service during almost a year of detention did not reveal any significant psychopathological symptoms, except for sleep difficulties and anxiety; pharmacological treatment was consequently limited to low doses of anxiolytics and hypnotics. No behavioral disorders, self-harming gestures, aggression suffered or committed against other inmates, involvement in fights or conflicts were ever recorded. His behavior was always correct and respectful, with all the professional figures (health and penitentiary) with whom he interacted.

Psychodiagnostic assessment - including projective (Rorschach Inkblot Test), cognitive (Brief Neuropsychological Examination), and dimensional measures of impulsivity and anger expression - confirmed deficits in impulse control, marked suggestibility, and immature affective processing (Table 1). The Rorschach profile was consistent with fragile ego structure, external dependency, and low frustration tolerance, with defensive tendencies toward denial and projection. No elements of psychosis were identified.

Table 1. Summary of psychodiagnostics results

Instrument	*Main Findings*
Rorschach Inkblot Method (Exner CS)	Elevated Lambda (>0.99), PTI >3, SCZI >3; immature, externally dependent personality; deficits in impulse control and emotional regulation; fragile ego; no frank psychosis
Brief Neuropsychological Examination (ENB-3)	Global score above normative cut-off; intact cognitive functioning; no deficits in attention, memory, executive function, or visuospatial abilities
Barratt Impulsiveness Scale (BIS-11)	Total score = 66; elevated impulsivity across motor, attentional, and non-planning domains
State-Trait Anger Expression Inventory-2 (STAXI-2)	Scores within normal range; no clinically significant anger expression or control issues

Substance use – alcohol and cocaine – was classified as active but episodic, without clinical evidence of dependence or chronic intoxication state as defined in DSM-5

or consistent with the medico-legal criteria of irreversible impairment (art. 95 Italian Penal Code).

At the time of the offense, behavioral dyscontrol was judged to have resulted from a convergence of personality vulnerability (antisocial traits and residual impulsivity linked to prior ADHD) and the acute effects of substance use.

Although a childhood diagnosis of ADHD was previously documented, the current assessment did not confirm persistence of this disorder according to DSM-5-TR criteria.

However, no mental disorder of sufficient gravity to impair or abolish the capacity to understand or control actions was present, according to the rules of the Italian penal code (art.88 e 89).

For the crime committed, the judge sentenced G.P. to 9 years and 11 months in prison. During the approximately one-year period of incarceration, G.P. participated in several psychological interviews; however, the case file does not record any notable findings from either a clinical or behavioral perspective.

Discussions

This case report illustrates the complex interplay between neurodevelopmental disorders, personality development, substance misuse, and violent offending, with particular relevance to forensic psychiatry practice. In particular, it highlights the importance of developmental trajectories in ADHD, where core symptoms may diminish in clinical significance over time, while comorbid personality and substance use disorders become increasingly prominent.

The subject, G.P., presented with a childhood history of ADHD, motor tics, and learning difficulties, which were managed with multidisciplinary interventions until adolescence. However, the subsequent decade was marked by a lack of psychiatric follow-up, during which G.P. exhibited relative stability in occupational and relational domains, but also engaged in escalating substance misuse involving alcohol, cannabis, and cocaine.

The absence of specialized psychiatric care during this critical developmental period is notable, as it reflects a well-documented phenomenon: many individuals with childhood ADHD experience diagnostic discontinuity in adulthood, often resulting in under-recognition and undertreatment of persistent symptoms (Wyler et al., 2024). This diagnostic gap is further compounded by the fact that residual ADHD symptoms, even below formal diagnostic thresholds, can contribute to ongoing functional impairments and increased risk of adverse outcomes, including SUD and antisocial behaviors (van der Plas et al., 2025). In G.P.'s case, the lack of ongoing intervention may have left underlying vulnerabilities – such as impulsivity and emotional dysregulation – unaddressed, increasing susceptibility to substance misuse and maladaptive coping strategies.

The forensic psychiatric evaluation conducted following the index offense revealed a structurally immature personality organization with prominent antisocial traits, persistent impulsivity, and limited capacity for emotional regulation. The results from the Rorschach Inkblot Method (Exner Comprehensive System) indicated elevated Lambda, PTI, and SCZI scores, suggesting a personality profile characterized by immaturity, external dependency, and notable difficulties with impulse control and emotional regulation. In contrast, the Brief Neuropsychological Examination (ENB-3) revealed a global score above the normative cut-off, reflecting intact cognitive functioning. On the Barratt Impulsiveness Scale (BIS-11), the patient's total score was 66, highlighting elevated impulsivity across all measured domains. Finally, the State-Trait Anger Expression Inventory-2 (STAXI-2) showed scores within the normal range, with no clinically significant anger expression or control issues. These findings align with longitudinal research indicating that childhood ADHD, particularly when comorbid with conduct disorder, constitutes a significant risk factor for the development of antisocial personality traits and criminal behavior in adulthood (Retz et al., 2021). Importantly, ADHD-related criminality is often characterized by reactive, impulsive aggression rather than premeditated violence, a pattern consistent with G.P.'s behavioral phenotype.

The diagnosis of ADHD received by G.P. during childhood and adolescence from child neuropsychiatry services was not confirmed in adulthood during the forensic psychiatric assessment. This observation warrants careful consideration of the inherent limitations in ADHD diagnosis, extending beyond the observed evolution of clinical manifestations over time in the present case. Some authors have suggested that the clinical phenomenology of ADHD requires more precise definition and application in diagnostic practice. A fundamental concern raised in the literature pertains to the validity of the ADHD diagnosis itself, as the signs and symptoms constituting the disorder are not pathognomonic and often overlap with other psychological conditions. Two key limitations have been noted: first, individual ADHD symptoms may not be abnormal per se; and second, symptoms presumed to be distinct and independently contributory to diagnosis frequently demonstrate overlap and are difficult to disentangle. Consequently, the imprecise and insufficiently distinct features used to define ADHD may contribute to misdiagnosis (Malhi et al., 2025).

Substance misuse emerged as a critical moderator of risk in this case. Both alcohol and cocaine are well-established contributors to disinhibition, emotional reactivity, and violent behavior, especially in individuals with pre-existing impulsivity and antisocial traits (Kraanen et al., 2014). The acute effects of these substances likely precipitated the escalation of aggression observed during the index offense, which involved severe intimate partner violence. This pattern is supported by epidemiological evidence demonstrating that concurrent alcohol and cocaine

use significantly increases the risk of impulsive and violent acts, including IPV (Smith et al., 2012).

The offense involved attempted homicide against the defendant's intimate partner, qualifying this case as IPV. This presentation partly aligns with established patterns of relational vulnerability in ADHD populations. Adults with ADHD experience significantly fewer stable romantic relationships and employ more maladaptive conflict-resolution strategies than neurotypical counterparts (Babinski et al., 2010; Wymbs et al., 2011). Adolescent ADHD populations similarly demonstrate high romantic relationship turnover and diminished physical intimacy. Critically, greater self-reported emotional dysregulation correlates with increased romantic involvement, higher partner numbers, sexual activity frequency, and elevated rates of unprotected sex - factors compounding relational instability. These relational impairments represent significant forensic considerations in IPV contexts (Margherio et al., 2021).

Furthermore, ADHD is characterized as a disorder of self-regulation encompassing deficits in emotional control (de la Fuente et al., 2019). This combination of frustration building and poor behavioral and emotional control could contribute to the relation between ADHD and IPV, both as victim and perpetrator (Arrondo et al., 2023).

On careful exploration of G.P.'s relational history, it emerged that he had only one long-term, stable romantic relationship, and thus did not display the more commonly reported relational patterns characteristic of this population. However, this relationship was characterized by jealousy on the girlfriend's part and mild controlling tendencies exhibited by him. The sustained quality of the romantic relationship prior to the offense suggests clinical remission of core ADHD symptoms associated with developmental progression and attainment of adulthood. The commission of the offense was not primarily attributable to ADHD-related functioning within the relationship, but rather to the acute effects of substance abuse.

The forensic assessment also highlighted the importance of distinguishing between acute substance-induced behavioral dyscontrol and chronic psychiatric impairment. In G.P.'s case, no mental disorder of sufficient gravity to impair or abolish criminal responsibility was identified, always according to the indications contained in the Italian penal code, which however does not provide for reductions in punishment for crimes committed in a state of acute intoxication. For these reasons a full criminal responsibility was attributed. This underscores the need for forensic psychiatrists to carefully evaluate the temporal relationship between substance use, psychiatric symptoms, and criminal behavior, as well as the legal implications of these findings (Raharjanti et al., 2021). At the same time, in our opinion, it indicates the need for a review of the penal provisions on the subject of substance abuse in criminal behavior.

From a developmental perspective, the case exemplifies the concept of fluctuating symptom trajectories in ADHD. While G.P. demonstrated periods of relative stability and symptom attenuation, untreated neurodevelopmental vulnerabilities and comorbid substance misuse ultimately converged to increase the risk of violent offending. This pattern is consistent with emerging evidence that ADHD may follow a relapsing-remitting course, influenced by environmental and developmental factors (Norman et al., 2023).

The case also raises important questions about the role of mental health services in early identification, intervention, and risk management for individuals with neurodevelopmental disorders. The absence of a supportive social network and ongoing psychiatric care may have contributed to G.P.'s increased vulnerability to substance misuse and criminal behavior (Swinkels et al., 2020). Conversely, engagement with specialized services - including pharmacological and psychological interventions - has been shown to reduce criminal recidivism and improve functional outcomes in individuals with ADHD (Dalsgaard et al., 2015; Ghirardi et al., 2020).

Forensic outcomes are critically shaped by diagnostic continuity challenges. Wyler et al. (2024) observed that childhood ADHD diagnoses in offender populations frequently become «*lost*» in adulthood - either through diagnostic substitution (e.g., personality disorders) or inadequate reassessment - despite evidence that residual symptoms below diagnostic thresholds persist. This diagnostic discontinuity carries significant implications, as untreated ADHD elevates re-offending risks and compromises rehabilitative outcomes Collectively, these trajectories underscore ADHD's lifelong impact, where fluctuating symptoms interact with environmental demands to produce varied adult outcomes.

Recent research underscores the substantial role of psychiatric comorbidities in shaping the forensic trajectories of individuals with a history of ADHD, as exemplified in the present case report. These comorbidities amplify criminal risk among adults with ADHD, particularly in males exhibiting the combined presentation alongside conditions such as oppositional defiant disorder and alcohol use disorder, which are associated with an increased risk of criminal behavior (Modesti et al., 2025).

The presence of ADHD introduces complex factors in judicial decision-making. While ADHD is frequently associated with stigmatized perceptions of dangerousness (Mueller et al., 2012), empirical analyses reveal contradictory dynamics in legal contexts. Although ADHD diagnoses may nominally influence sentencing proceedings, they typically receive limited weight in final dispositions across juvenile and adult cases, with judicial reasoning seldom connecting symptomatology to treatment prospects or rehabilitative potential (Verdun-Jones & Butler, 2013).

Notably, Berryessa's research demonstrates a counter-intuitive effect: an ADHD diagnosis actually reduced stigmatization regarding perceptions of treatability, subsequently mediating increased support for rehabilitation (Berryessa, 2018). This aligns with evidence of growing

public acceptance of ADHD's treatability, driven by literature and media addressing performance-related anxieties in academic/professional domains Hinshaw, S. P., & Scheffler, R. M. (2014). This evolving paradigm suggests increasing societal recognition of ADHD's treatability - extending beyond clinical/educational settings into criminal justice contexts.

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Casistica

Criminal responsibility and substance abuse, two forensic cases and an international review

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Abstract

Objective: This paper explores how substance abuse influences criminal responsibility, combining two forensic case studies with a comparative analysis of international legal approaches.
Methods: A multidisciplinary review was conducted, integrating legal frameworks and psychiatric literature across jurisdictions. Two Italian forensic cases involving synthetic cannabinoids and chronic polysubstance dependence are examined to illustrate critical issues.
Results: Jurisdictions vary significantly in how they treat intoxication and addiction in criminal law. In particular, New Psychoactive Substances (NPS) present challenges due to their rapid evolution and psychiatric unpredictability. Neuroscientific research reveals long-standing cognitive impairments in individuals with chronic addiction.
Conclusions: The binary legal distinction between voluntary intoxication and insanity is inadequate in addressing complex addiction-related behaviors. Integrating clinical knowledge into legal standards is essential to fairly assess diminished capacity without negating accountability.

Keywords: Substance-Related Disorders; Criminal Responsibility; New Psychoactive substances (NPS); Chronic Intoxication; Addiction

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Criminal responsibility and substance abuse, two forensic cases and an international review

Introduction

The impact of substance use in relation to criminal behavior has been before the courts for some time. It is particularly important for today's forensic mental health professionals, given that the high correlation of major mental illness with substance use disorders. While there may be some direction established through case law, attorneys and others involved with the legal process often rely on the opinion of the forensic mental health clinician in cases in which a defendant has used a mind-altering substance that could have affected behaviour at the time of the alleged crime. Talking about criminal responsibility and substance abuse, an important premise is that in Italy the Penal Code dates back to 1930, a time in which the criminogenic problem of drug addiction was negligible. According to the Penal Code, the concept of responsibility for a crime is based on the concept of imputability, that is to say that a criminal defendant must be shown to have the integrity of the capacity to intend and the capacity to will when he committed the crime (Ciccone & Ferracuti, 1996). The capacity to intend, i.e., is "the ability that the individual has to understand the value and therefore the negative social value of that action or omission". The capacity to will, is "the ability to have control of oneself to reach or avoid the deed that constitutes the crime (the capacity to act on one's free will)" (Carabellese & Felthous, 2016). Offenders can be deemed not guilty by reason of insanity (NGRI) based on Article 88 of the Italian Penal Code when the capacity to intend or the capacity to will are totally impaired (*infermità*) or partially mentally impaired (*semi infermità*) based on the Article 89 of the Italian Penal Code, usually after having served a reduced imprisonment. The voluntary acute intoxication is a condition that generally did not lead to the irresponsibility for a crime committed because a crime committed in a state of preordained incapacity is punishable, according to Article n. 87 of the Italian Penal Code. The peculiarity of these actions is that the execution of the crime is fictitiously traced back to the moment in which the agent preordained the state of incapacity (*actiones liberae in causa*). The Article 94 of the Italian Penal Code states that when the crime is committed by a drunk person, and this is habitual, the sentence is increased. For the purposes of criminal law, anyone who is addicted to the use of alcoholic beverages and is frequently drunk is considered a habitual drunk. The aggravated sentence established in the first part of this article also applies when the crime is committed under the influence of narcotic substances by those addicted to the use of such substances. Although alcoholic substances and narcotic substances are treated in the same way, there is however a difference regarding habituality. In fact, while a person is defined as habitual drunk when he is addicted to the use of alcohol and is in a frequent state of drunkenness, for narcotics the habit and the consequent increase in punishment are implemented only due to the fact that the person is addicted to substance use. For acts committed in a state of chronic intoxication caused by alcohol or narcotic substances based on Article 95 of the Italian Penal Code, the provisions contained in articles 88 and 89 apply. Law does not provide a definition of what is a chronic intoxication but this mental state must determine a total impairment or partial impairment of the capacity to intend or to will at the time of the crime. One of the main orientations of jurisprudence identifies chronic intoxication as a permanent alteration of the biochemical balance of the brain, the other main orientation identifies its incurability as the main characteristic of chronic intoxication (Snenghi, et al 2012). This concept was reiterated over the years by the Court of Cassation, which in the judicial system in force in the Italian Republic represents the judge of legitimacy of last resort. A recent sentence states:

> *"The situation of drug addiction that affects the ability to understand and will is only that which, due to its ineliminable character and the impossibility of recovery, causes permanent pathological alterations, that is, a pathology at the cerebral level involving psychopathies that persist regardless of the renewal of an action closely linked to the intake of narcotic substances, such as to make it appear indisputable that we are faced with a real mental illness"* (Cassazione penale, Sez. VI, 2018).

Drugs of natural and synthetic origin

Synthetic drugs have proliferated in drug markets in the last decade. However, methamphetamine and 3,4-Methylenedioxymethamphetamine (MDMA) are probably the most widely used and supplied synthetic drug worldwide and their manufacture and use continue to expand across the globe (UNODC, 2023). Synthetic cannabinoids encompass a wide class of ever-changing compounds, which continue to be found in drug markets everywhere. New Psychoactive Substances (NPS) include synthetic cannabinoids (Spice, K2), synthetic cathinones (bath salts, flakka, methylone), psychedelics such as tryptamines (DMT, 5-MeO-DMT) and phenethylamines (MDMA, Ecstasy, Molly). These substances, that are not subject to control, have reshaped a drug market once dominated by the drugs of natural origin. Drugs of synthetic origin compare to the drugs of natural origin offer

many advantages to the criminal organizations in terms of materials, scale and scope of production, production time (hours or days vs. months) and trafficking (larger quantities of primary inputs and vast distances of transport vs. smaller quantities of primary inputs and shorter distances of transport). If the synthetic drugs are very popular worldwide, the consumption of the drugs of natural origin is constantly increasing. The United Nations Office on Drugs and Crime (UNODC) reports that 3.9% of the global adult population uses cannabis, with a total number of 180.6 million of cannabis users worldwide. This outweighs the number of users of all other illicit substances considered together (UNODC, 2023).

Substances and psychosis

From a clinical point of view, the difference between the acute intoxication and drug addiction has been overcome in the DSM-5 (American Psychiatric Association, 2013), abolishing the difference between use and addiction and introducing the Substance Use Disorders (SUDs). As regard the pharmacology and the psychoactive effects of the drug of the natural origin, these are largely understood while those of the drugs of synthetic origin are not always known or predictable even if the chemical structure is known (UNODC, 2023 Table 1 page 17). Cannabis use has been widely reported to induce acute psychotic experiences, to affect the severity of psychotic symptoms, and previous meta-analyses have reported a 2-fold increase in the risk to develop a psychotic disorder in cannabis users compared to non users (Marconi, et al. 2016). Current evidence shows that high levels of cannabis use increase the risk of long-lasting psychotic disorders and confirms a dose-response relationship between the level of use and the risk for psychosis. As for the most common psychostimulants, the clinical presentation of amphetamine-induced psychosis is similar to schizophrenia spectrum illnesses, and can include disorganized thoughts, impaired concentration, delusional beliefs (often persecutory in nature), hallucinations, and hyperactivity. Regarding the use of cocaine, transitory paranoia resulting from acute effects of cocaine use are one of the most common effects of use, occurring in about 90% of cases (Roncero, et al., 2012*).* The use of methamphetamines lead to transient psychosis in about 23% of the users, common clinical characteristics of methamphetamine-associated psychosis include persecutory delusions, auditory and visual hallucinations, hostility, anxiety, depression, cognitive disorganization, and hyperactivity. There is inconsistent evidence whether negative symptoms of psychosis are associated with this phenomenon. As with other substances, the risk of psychosis appears higher with increased drug potency and frequency of use (Voce, et al. 2018). In the international literature are also described cases of Toxic Leukoencephalopathy (TL), a neurologic disorder in which the white matter of the brain is damaged by a leukotoxic substance, induced by inhalation of heroin, glue, toluene and other volatile compounds such as fentanyl (Eden, et al. 2024). In these cases prognosis and recovery generally depend on the degree of white matter injury, including endothelial injury, myelin sheath degradation or a combination of the two. In a scoping review on the prognosis in substance abuse-related acute TL, Macchi et al. (2022) found that among 52 cases, 21 (40.4%) individuals died with mean time to death of 28.2 days; with mean follow-up of 12.8 months, 10 (19.2%) survived with no recovery, 17 (32.7%) had partial recovery, and 4 (7.7%) individuals had full recovery.

Substance Induced Psychosis (SIP) and Primary Psychotic Disorder (PPD)

Clinicians face a key diagnostic challenge in the differentiation between SIP and a PPD. SIP is defined in the DSM-5 (American Psychiatric Association, 2013) by the presence of delusions and/or hallucinations that arise and persist in the context of acute intoxication or withdrawal from a substance and are not exclusively attributable to delirium. A diagnosis of SIP also requires a lack of insight into one's symptoms and remission of symptoms within one month of sustained abstinence, although some studies suggest that psychosis can persist long after abstinence. Longitudinal studies of SIP suggest that approximately 11-46% of persons will progress to schizophrenia with different risk of progression depending on the type of substance used (Gicas, et al., 2022). Although patients with SIP demonstrated similar positive symptom severity and more severely disturbed behaviour at admission compared to patients with PPD, they also exhibited more rapid abatement in both symptom categories (Dawe, et al. 2011). Other authors suggested that following cessation of substance misuse, patients initially diagnosed with SIP did not experience more rapid symptom remission compared to patients with a PPD and concomitant substance use. In fact, patients with SIP demonstrated significantly less improvement of hallucinations from baseline to follow-up when compared to patients with PPD. Although epidemiological research is scarce, one study estimates the incidence of SIP to be approximately 6.5 in 100.000 persons per year, compared to 9.7 with PPD and co-morbid substance misuse, and 24.1 with PPD alone (Weibell, et al. 2013). Among patients presenting to intervention services for First Episode Psychosis (FEP), the proportion diagnosed with SIP as opposed to PPD or affective psychosis ranges between 6% (Thompson, et al. 2016) and 10% (O'Connell, et al. 2019). However, in studies examining an FEP cohort with past-month substance use, the prevalence of SIP increased dramatically, ranging from 44% (Caton, et al. 2005) to 56% (Fraser, et al. 2012). Although patients with SIP use substances at higher rates than patients with PPD, substance use is still pervasive among patients with PPD, with reported rates varying from 35% to 61% (O'Connell, et al. 2019).

Criminal responsibility and substance abuse worldwide

France

Criminal responsibility has been a core principle of French criminal law since the early nineteenth century.

Despite debates and sporadic experiments throughout the nineteenth and twentieth centuries (Renneville 2003; Guignard 2010), the dichotomy between psychiatric hospitals and prisons still underpins French criminal law. A recent law adopted on January 24, 2022, reformed the insanity defense in France. This law provides that defendants may not employ an insanity defense in cases where their discernment was temporarily eliminated due to the voluntary consumption of psychoactive substances shortly before the crime (Library of Congress, 2022). Before this legislation, French law allowed an insanity defense to apply to all cases where the accused suffered from a mental disturbance that eliminated their discernment or control over their actions, without making any distinctions as to the cause of this mental disturbance. Additionally, the law of January 24, 2022, created two new criminal offenses that apply when a defendant was found to be penally irresponsible for a crime: deliberately taking a psychoactive substance before committing murder and before committing assault. In such cases, persons found penally irresponsible for the main crime (murder or assault) may still be prosecuted for the act of taking an intoxicating substance. This approach respects *mens rea* principles and is reminiscent of Paul Robinson's 1985 proposal: a person "may be properly punished if his liability is based on his initial conduct in causing the justifying circumstances and on his culpable state of mind, at that time, as to causing the justified harm" (Robinson, 1985).

Germany

Section 63 of the German Penal Code (Strafgesetzbuch, "StGB") stipulates that a defendant who committed a crime in a state of insanity (*Schuldunfähigkeit*) or diminished responsibility (*verminderte Schuldunfähigkeit)* can be committed for an indeterminate period of time to a psychiatric hospital if, because of this state, he is a danger to public safety (Bijlsma, et al. 2019). In addition to the preventive commitment to a psychiatric hospital of Section 63 StGB, Section 66 StGB provides for preventive detention for responsible offenders (*Sicherungsverwahrung*) who have been sentenced to at least two years of imprisonment for a crime committed with intent (*Vorsatz*). Thus, in Germany, not only diminished or not responsible offenders but also offenders responsible for their crimes can be subjected to types of indeterminate loss of freedom based on their dangerousness. As regard the issue of voluntary intoxication, if a person voluntary becomes intoxicated and commits an unlawful act while in that state but can not be punished for the unlawful act because they lacked criminal responsibility due to the intoxication, they will receive a punishment of up to five years inprisonment or a fine (Mackay & Brookbanks, 2022). In case of serious offences committed while voluntary intoxicated the law draws upon the principle of *actiones liberae in causa,* however this principle only permits attribution of culpability for result crimes where the type of offense was foreseeable, that is when the alleged offense requires a specific intent, or *mens rea*, which the defendant may argue that he could not have possessed due to the effects of intoxication.

England and Wales

From a historical point of view, in 1843 the M'-Naghten case was the first in modern England that focused the attention of the authorities and the public at the highest level on the issue of insanity and criminal responsibility. The discussions that followed the trial ultimately led to the M'Naghten Rule, also known as the M'Naghten Test. This test focuses on the following: 1. Whether a criminal defendant knew the nature of the crime 2. Whether they understood right from wrong at the time they committed the crime. Therefore, a defendant must meet one of these two distinct criteria for a court to declare them legally insane (Strom & Bender, 2023). Nowadays criminal cases that have been investigated by the police and other investigative organisations in England and Wales are prosecuted by the Crown Prosecution Service (CPS) (Mental Health Conditions and Disorders: Draft Prosecution Guidance, 2019). The key documents that are relevant to the CPS policy in dealing with cases in which the defendant has a mental disorder are: the Code for Crown Prosecutors (the Code); the Home Office Circular 66/90, Provision for Mentally Disordered Offenders; and offenders with mental health problems and/or learning disabilities within the National Conditional Cautioning Framework. Section 1 Mental Health Act 2007 amended section 1 Mental Health Act 1983 and defined mental disorder as "any disorder or disability of the mind" (Mental Health Act, 2007). Examples of clinically recognised mental disorders include mental illnesses such as schizophrenia, bipolar disorder, anxiety or depression, as well as personality disorders, eating disorders, autistic spectrum disorders and learning disabilities. Dependence on alcohol or drugs does not come within the meaning of "mental disorder" for the purposes of the Mental Health Act 1983, section 1 (Mental Health Act, 1983). However, mental disorders which accompany or are associated with the use of or stopping the use of alcohol or drugs, even if they arise from dependence on those substances, may come within the meaning of "mental disorder" for the purposes of the Mental Health Act 1983.

United States of America

If a defendant is found to be competent to stand trial and not criminally responsible because of his mental illness, the U.S. jurisdictions prescribe the special verdict of NGRI or some equivalent (Simon & Ahn-Redding, 2008). The American Law Institute's criterion for a successful insanity defense requires that the defendant be so affected by mental illness that he could not conform his behavior to the requirements of the law. These standards vary from jurisdiction to jurisdiction (Feix & Wolber, 2007). Both standards require the presence of a mental disease or defect that caused the defendant to be unable to understand or control his or her actions at the time of

the crime. Therefore, whether a defendant was using drugs or alcohol while committing a crime should matter little, if at all, to the question of insanity when the criteria for an insanity defense have not been met. Federal and state courts provide a wide range of interpretations of whether, and under what circumstances, the effects of substance abuse could constitute the threshold condition necessary for the insanity defense. Interpretation could range from the prohibition of any defense when there is evidence of voluntary intoxication to allowing the insanity defence when voluntary intoxication has resulted in only temporary exacerbation of an existing psychosis. However, if it can be demonstrated that substance use has triggered or exacerbated psychotic symptoms that become distinct and independent of acute intoxication (referred to as settled insanity), the threshold condition could be met. "Settled insanity" is a legal concept that allows longer term impairment resulting from substance use to serve as the basis of an insanity defense (Appelbaum, 2021). California courts have identified four criteria to determine whether a condition qualifies as settled insanity. The condition must be fixed and stable, last for a reasonable duration (although not necessarily permanently), not be solely dependent upon the ingestion and duration of effect of the drug, and meet the jurisdiction's legal definition of insanity. In the federal courts, as well as in some state courts, the presence of voluntary intoxication rules out any use of the insanity defense. The U.S. Congress enacted the Insanity Defense Reform Act in 1984, which narrowed the definition of insanity that had developed in case law and shifted the burden of proof to the defense at the "clear and convincing" level. The courts have generally not upheld substance-induced psychotic symptoms as providing for an insanity defense when the substance in question had been taken voluntarily. Voluntary intoxication may be considered a "partial" defense when the alleged offence requires a specific intent, or *mens rea*, or criminal intent. In most states, defendants are not held responsible for crimes committed under the influence of involuntary intoxication, because they are considered "unconscious" and unable to formulate the *mens rea* to commit the offence. Voluntary drunkenness is generally never an excuse for a crime, but where a defendant is charged with murder, and it appears that the defendant was too drunk to be capable of deliberating and premeditating, in that instant intoxication may reduce murder in the first degree to murder in the second degree, as long as the specific intent did not antedate the intoxication. Such instances of diminished capacity, while possibly providing some relief for the defendant, do not result in an acquittal, unlike a verdict of not guilty by reason of insanity. Diminished capacity is an argument about the specific act for which the defendant is culpable (e.g., first-degree versus second-degree murder), whereas the insanity defense is an argument that the defendant should not be held culpable at all.

Russia

According to Russian law, an individual who commits a crime in a state of psychosis is deemed as not responsible for their actions. They are sent for mandatory treatment in a psychiatric hospital. This applies to psychotic states, regardless of their type or origin. Hence it results that SIP are accepted as a reason for a not guilty on the grounds of insanity decision (Mellsop, et al., 2016). Simple intoxication due to any substance is not a mitigating circumstance and cannot serve as a defence. Recent Russian legislation provides for the possibility of a so-called alternative treatment for convicted drug addicts who had committed offences of little gravity. They obtain a deferred sentence if they agree to undergo treatment and social rehabilitation. Subsequently, if they are considered to have achieved remission, the court may release them without further punishment. In the alternative situation where a person is convicted and, the court may impose an obligation to undergo treatment, medical and social rehabilitation in accordance with the law 313 and article 72 of the criminal code of the Russian Federation.

Japan

In Japan under Article 39 of the Penal Code, an insane act is not punishable, and an act of diminished responsibility causes the punishment being reduced. There is no fair definition of insanity in Japanese Penal Code (Mellsop, et al., 2016). The Supreme Court (1931) described insanity as a state in which the capacity to be aware of the difference between good and evil or to dominate oneself based on that recognition is absent due to mental disorders. Diminished responsibility is a condition in which those capabilities are strongly reduced, as recognized in a verdict (A Judgement Document by Supreme Court. Pronounced in December 3rd 1931; in Japanese, cited in: Mellsop, et al., 2016). In this background 'mental disorders' have been considered as any of the mental disorders catalogued in the International Classification of Diseases 10th edition (World Health Organization, 1992). No specific disorder was officially eliminated from this list. Therefore, drug-induced psychoses may theoretically qualify for an insanity defence or diminished responsibility. Methamphetamine has been the dominant illicit drug used in Japan since at least the middle of the 20th Century. Although methamphetamine and other drug-induced psychoses can hypothetically inform an insanity defence, it is extremely rare for a court to acquit a defendant with drug-induced psychosis on account of insanity. There may be two reasons for this. First, under the Japanese legal system, public prosecutors can determine whether they indict the suspect or not, no matter what is the type of crime. Comprehensively, public prosecutors dispose the criminal responsibility of the suspects in most cases, tending not to prosecute suspects who appear severely impaired due to mental illness. Secondly, the strong link between methamphetamine use and organised crime in Japan may also have generated negative public

opinion against drug and particularly methamphetamine-users which may be influencing the judgement of the courts. When the Court determines criminal responsibility different factors are considered including behaviours around the crime, criminal history, personality, motives and type of the crime, the extent of psychotic symptoms, and so forth. Historically there have been cases in which full responsibility was ascribed to defendants with drug-induced psychoses and verdicts in which it was not (Nakatani, et al, 2010). While the courts have in the past deemed alcohol intoxication as a state sufficient to diminish the responsibility, at least in some instances, this is nowadays extraordinary (Mellsop, et al., 2016).

China

The history of drug use in Mainland China has been divergent from that in Western countries (Hao et al., 1997). The "anti-drug campaign" in 2005 led to an important reduction of the opiate drug use however, the use of amphetamine type stimulants has increased in China over recent years, in fact the prevalence of amphetamine use amongst drug users rising from 6.7% in 2005 to 34.4% in 2012 (Du et al., 2015). The contemporary psychiatry has increased demands on mental health services necessitating the creation of specialised psychiatric wards for patients with drug induced mental disorders (Zhang, et al., 2014). The Act N. 18 of the Chinese Criminal Code 1997 considers the criminal responsibility of those who offend while suffering SIP (Mellsop, et al., 2016). This exposes the general assumptions related to the concept of NGRI as follows: 1. A mentally ill individual who determines dangerous consequences at the time when he is unable to recognize or unable to control his own conduct is not to bear criminal responsibility after being established through accreditation of legal procedures; but his family or guardian shall be ordered to subject him to strict surveillance and arrange for his medical treatment. If necessary, he will be given compulsory medical treatment by the government. 2. A person whose mental illness is of an intermittent nature shall bear criminal responsibility if they commit a crime during a period of mental normality. 3. A mentally ill person who commits a crime at a time when they have not yet completely lost their ability to recognize or control their own conduct shall bear criminal responsibility but they may be given a lesser or a mitigated punishment. 4. An intoxicated person who commits a crime shall bear criminal responsibility (Mellsop, et al., 2016). While the Code is clear that intoxication can not constitute a defence, (Wang, et al., 2006) there is no specific mention of the substance induced mental disorders. Therefore, there has been a multiplicity of point of view and practice within China. While the Ministry of Justice enacted assessment guidelines for criminal responsibility in 2011, this has not resulted in consistency of practice (Zhang, et al., 2014). The guidelines have recommended psychiatrists to differentiate between voluntary drug use and involuntary intoxication, but the inconsistency remains. Arrested persons who are suffering a suspected SIP are usually assessed in a psychiatric facility or a prison hospital, as is any other person recognised to be seriously mentally ill (Wang, et al., 2006). Compulsory treatment is available for those with substance addiction disorders. The Narcotics Control Law, adopted in 2007, provides for identified drug users to receive mandatory inpatient treatment. After discharge compulsory rehabilitation treatment is continued in the community under supervision. If patient relapse, they may be sent to the Compulsory Isolation Center for Drug Rehabilitation, under the jurisdiction of the forensic system (Du, et al., 2015).

India

India, like many other countries, recognizes the concept of legal insanity and incorporated the criteria of the defense of insanity in section 84 of the Indian Penal Code (IPC)(Bhatnagar, 2020). Accordingly, a person cannot be held liable for his offense if such a person, at the time of the commission of a crime, was incapable of understanding the nature of the act and/or the concept of right and wrong (India Code, 1860). The scope of section 84 is limited only to the mental state of an accused at the time of the commission of an offense. The mental state of an under-trial person and/or a prisoner cannot be dealt with under this section. However, this section does not define insanity, unsoundness of mind, or mental disorder, thus, it carries different meanings in different contexts (Ajmal, et al., 2023). More recently, Section 2(1) (s) of the Indian Mental Healthcare Act, 2017 (India Code, 2017) defined mental disorder as an illness which significantly and adversely affects various fundamental human functions. According to lawful perspective, an accused must be held liable of the crime that he has committed, so long as the accused realize that the offense done is unreasonable to law. According to the clinical perspective if a person who is under the influence of any drug commits a crime can use the plea of insanity under Section 84. However, only the legal insanity and not the medical insanity falls within the bracket of section 84. India Legal System only recognizes cognitive aspects of the human brain, which implies that accused is not competent of understanding the complexion of wrongdoing or crime and what is wrong and against the law. The Supreme Court ruled out that people who are mentally not stable and are unable to seek protection from a criminal trial, as it is the responsibility of accused to demonstrate the existence of lunacy at the time or hour of committing an offense. The consideration defense of plea so, therefore there has to be a distinction between clinical insanity and legal insanity. The test which should be implemented would be legal insanity and not clinical insanity.

New Zealand

The New Zealand Court has considered mental disorders as a term which "defies precise definition and which

can comprehend mental derangement in the widest step" (Mellsop, et al., 2016). The Court decides if the mental state of the perpetrator at the time of the offending, as described in expert documentation, could be defined as a disease of the mind, and to guide the jury appropriately. Comprehensively, the insanity defence is scarcely adopted in New Zealand, and commonly only in cases involving severe crimes, such as murder. If SIP can be considered as mental disorder from a legal perspective has been controversial. The New Zealand Penal Code gives little instructions and decisions are based on case law. Psychoses are commonly considered a disease of the mind when they originate from an inner cause. Inner causes can include mental disorders like schizophrenia or mood disorders while outer causes can comprehend traumatic brain injuries or the use of substances or alcohol (Adams, et al., 2008). A transitory psychosis caused by substance use is not currently deemed as a disease of the mind in the legal terms. However, it is recognised that offenders may have an underlying mental disorder in which psychotic symptoms, with associated offending, are accelerated by drugs. One of the two informal conditions required for insanity defense is that the induced psychotic state would persist without regard to the substance use (Adams, et al., 2008). In such cases, the Tribunal often concentrates on if the primary cause of the psychosis is substance use or whether a primary mental disorder is largely culpable. Essentially, this can be not solvable problem (Thom, et al., 2011). In the real world the legal definitions often tend to oversimplify such clinical complexity, emphasising dualism over multiplicity. Current legal practise is that SIP cannot result in a successful NGRI defence because it is considered to be a self-induced condition involving an external factor (Adams, et al., 2008). This criteria has been confirmed by the New Zealand Court of Appeal. In New Zealand intoxication can be used as a defence if it can be shown that the defendant was so intoxicated as to have been unable to form the requisite intent necessary for the crime (*mens rea*). The duty of proving the requisite mental state rests on the prosecution. New Zealand does not recognise diminished responsibility as a partial defence. Mitigating factors are taken into account at sentencing. However, under s9(3) of the Sentencing Act, sentencing Judge is expressly prohibited from considering intoxication as a mitigating factor, but mental disorder can be considered. Sometimes the judge will order that an alcohol and drug assessment be completed before sentencing.

Australia

In the last decade legislation and public policy regarding intoxication and criminal responsibility has been the subject of significant review across all six states of Australia. Victoria is the only state where common law applies in relation to mental health defences (Yannoulidis, 2006). In a case appeal by the Crown to the High Court of Australia against the acquittal of the defendant, the High Court in a majority decision ruled that evidence of intoxication was admissible in determining the voluntary nature of an act. In the remaining states provisions referred to intoxication and criminal responsibility, based on M'-Naghten's rules, are contained in the respective criminal code of each jurisdiction. As an example, Queensland legislation includes an additional component pertaining to deprivation of control. It states that intentional intoxication excludes a person from raising the insanity defence, however, as in Victoria, intoxication is relevant in determining whether a person had intent to commit an offence, where intent is an element of the offence. Scott (2012), describing a case related to amphetamine induced psychosis and murder, traced the evolving interpretations of the Criminal code, from cases where drug induced psychosis alone was accepted as a defence, to a much narrower interpretation in a more recent appeal court decision (The Queen v Clough). In the latter case, the accused had a pre-existing mental disorder, had intentionally used cannabis and amphetamines more than 24 hours prior to the offence but was actively psychotic following this substance use. The Court of Appeal considered any effect of intentional intoxication, irrespective of duration, would not be afforded an insanity defence (Scott, 2012). For individuals afforded an insanity defence, where substances were implicated or a problem more generally, abstinence from substance use would likely be ordered as a fundamental element of an individual's treatment.

United Arab Emirates

The criminal law of the United Arab Emirates (UAE) recognizes the principle of the insanity defense against the criminal responsibility of an accused. The insanity defense is dealt with under Article 138 of Federal Law No. 31 (2021), which primarily revolves around the principle of the complete inability to control one's actions at the time of perpetration of an offense due to mental disorders (Ajmal & Rasool, 2024). Article 1 of Federal Law No. 10 (2023) on Mental Health defines a mental disorder as a disturbance in mental abilities sufficient to cause a defect in everyday functioning. However, the role of medical opinion is central in determining the plea of insanity. The law on the defense of insanity in the UAE was comprehensively dealt with under Article 60 of Federal Law No. 3 (1987). Article 60 asserts that criminal responsibility cannot be fixed on a person if such a person is not in his senses at the time of perpetration of the crime, and that too is subject to the fulfilment of certain conditions. The loss of consciousness and/or perception was the criteria for the defense of insanity. The loss of perception or consciousness must be either due to mental handicap, madness, or the influence of intoxicating substances taken unconsciously (Article 60, Federal Law No. 3, 1987). Moreover, under Article 2 of Federal Law Number 3 (1987), an accused in a criminal charge is presumed innocent until proven guilty, and this principle is followed in cases of plea of insanity too. The plea of insanity cannot be taken merely because the accused has some mental condition and/or disorder; rather, the complete loss of control over one's actions is the main criterion in this regard (Ar-

ticle 138, Federal Law No. 31, 2021; Ajmal & Rasool, 2024). The law in the UAE recognizes the defense of insanity not just in the case of any permanent mental disorder but also if the insanity is induced in an offender due to the use of drugs, narcotics, or other intoxicating substances. However, insanity, mental deficiency or unconsciousness because of drugs, etc. can be taken as a defense if such intoxicating substances are given to a person forcefully or taken by him unintentionally. Moreover, in the given scenarios, an insanity defense can be taken if there is a substantial loss of perception or will at the time of the perpetration of a crime. Partial loss of perception or will at the time of perpetration of a crime because of drugs, etc. will be dealt with under the principle of diminished capacity (Article 62, Federal Law No. 31, 2021; Ajmal & Rasool, 2024). It is evident from Article 63 of Federal Law No. 31(2021) that the want of perception or will because of intoxication material taken by a person deliberately cannot be taken as an excuse; even in certain circumstances, voluntary taking of such materials will be an aggravating factor (Article 63, Federal Law No. 31, 2021). Ajmal & Rasool (2024) claimed that the law on insanity defense in the UAE can be further developed and suggested important changes in the cited Articles in order to align with the modern literature of mental health sciences and jurisprudence in the context of legal insanity.

South Africa

Since 1977 the insanity defense in South Africa has been governed by statute (Swanepoel, 2015). In terms of section 77 of the Criminal Procedure Act, an accused who suffers from mental illness or defect may as a result not be fit to stand trial. The enquiry into the capacity of the accused to understand the nature of the trial process is seen as a preliminary issue that has to be finalised before the issue of criminal responsibility for the conduct is examined. If the insanity defense is raised, the test to determine the offender's criminal responsibility must be applied. This test is set out in section 78 (1) of the Criminal Procedure Act Section 78 (1) reads as follows: a person who commits an act which constitutes an offence and who at the time of such commission suffers from a mental illness or mental defect which makes him incapable - (a) of appreciating the wrongfulness of his act; or (b) of acting in accordance with an appreciation of the wrongfulness of his act, shall not be criminally responsible for such act. The content of section 78 (1) clarify that the words «an act which constitutes an offence» refer only to an act which corresponds to the definitional elements of the relevant crime. It is important to note that since the decision of the court depends on the facts and the medical evidence of each case. For the purposes of the insanity defence in South Africa there is no formal definition of mental illness. However, the court held in a case that in order to constitute a mental illness or defect it must at least consist in: «[A] pathological disturbance of the accused's mental capacity and not a mere temporary mental confusion which is not attributable to a mental abnormality but rather to external stimuli such as alcohol, drugs or provocation» (Swanepoel, 2015). In another case the accused, after driving away from a party at which he had been drinking, drove into a crowd of people, killing one and injuring five others. He was acquitted on the basis of his lack of intention due to his level of intoxication. The court, however, accepted that there were degrees of intoxication and depending on the extent to which an individual was intoxicated, his or her intoxication could impair either his or her intention, criminal capacity or the voluntariness of the conduct. Due to tremendous criticism with regard to this offender being acquitted due to a lack of intention, the legislature enacted a special offence in the Criminal Law Amendment Act 1 of 1988 that made it a criminal offence when the level of the accused's intoxication was such that he or she lacked capacity (Swanepoel, 2015). Furthermore, every person is presumed not to suffer from a mental illness or mental defect so as not to be criminally responsible in terms of section 78(1) until the contrary is proved on a balance of probabilities. Whenever the criminal responsibility of an accused with reference to the commission of an act or an omission which constitutes an offence is in issue, the burden of proof with reference to the criminal responsibility of the accused shall be on the party who raises the issue.

Case Study

Case Study 1

Luigi, a 29-year-old man with a stable occupation, regular lifestyle, and no prior psychiatric or criminal history was arrested following a sudden and exceptionally violent assault against a stranger in a shopping mall. Post-arrest toxicology screening revealed the presence of a new psychoactive substance (NPS) belonging to the group of synthetic cannabinoids, consumed through a smoking blend marketed as "legal incense." Witnesses reported that, shortly before the assault, the subject exhibited signs of confusion, fear, and claimed to be followed and spied upon, suggesting a hallucinatory state. Upon admission to hospital, immediately following the arrest, the patient presented with visual hallucinations, paranoid delusions, and partial amnesia of the event.

A forensic psychiatric evaluation ordered by the court concluded that the violent episode was a unique occurrence in the subject's life, and that the ingestion of the NPS had triggered an acute toxic psychotic episode. This episode, although fully reversible, significantly impaired his ability to understand and willfully control his actions at the time of the offense. Although the substance was taken voluntarily, the subject had no prior knowledge of its potentially psychotomimetic effects, as it was advertised online as legal and risk-free.

This case raises critical questions regarding criminal liability in the context of unclassified NPS and the standards for assessing criminal responsibility in the absence of pre-existing mental disorders.

Legislation and Criminal Responsibility in relation to New Psychoactive Substances (NPS)

New Psychoactive Substances (NPS), also referred to as "designer drugs," pose significant challenges for criminal legislation, given their rapid market emergence and continuous structural modifications designed to circumvent traditional legal controls. In Italy, the main legislative reference is Presidential Decree 309/1990, which has been repeatedly updated to include specific NPS in the official narcotic schedules through ministerial decrees, allowing for a more agile regulatory response compared to the past. Commonly used NPS include synthetic cannabinoids, synthetic cathinones, phenethylamines (similar to ecstasy or LSD), and potent synthetic opioids such as fentanyl. These substances are frequently sold online or in so-called "smart shops" under misleading labels such as "incense," "fertilizers," or "bath salts," to avoid detection by law enforcement.

The effects of NPS on human behavior are highly variable and often unpredictable. They may induce temporary psychotic states or significant cognitive-behavioral alterations. Clinical and toxicological assessment is further complicated by the lack of specific detection tests and standardized toxicological protocols.

From a legal standpoint, determining criminal responsibility in relation to NPS use is particularly complex. It involves evaluating the dangerousness, psychoactive potential, and the user's awareness of the illicit nature and consequences of their conduct. The key legal concept affected by NPS use is that of *actio libera in causa*. For instance, how should criminal liability be assessed in an individual who ingests a pill to enhance concentration, unaware that it contains a synthetic cathinone?

If there is no culpability in causing one's state of incapacity, criminal responsibility may be excluded. However, in practice, proving this lack of culpability is challenging, and courts tend to be cautious in recognizing this exception, particularly when the setting (e.g., raves or parties) involves foreseeable risks. The principle of *actio libera in causa* applies when a person voluntarily induces a state of incapacity (e.g., via alcohol or drug use), foreseeing or accepting the risk of committing an offense while in that state. However, when an individual consumes an NPS without knowledge of its effects, applying this principle becomes legally and ethically problematic. Italian jurisprudence generally requires a minimum subjective element of culpability: if the individual could not foresee—nor was expected to foresee—even abstractly, the psychotropic effects of the substance, then the requisite mens rea is absent.

According to Article 93 of the Italian Criminal Code, punishment is excluded only if the intoxication was neither voluntary nor negligent. Article 94 holds the intoxicated person liable if they acted with intent or negligence prior to becoming impaired. In the case of NPS, if ingestion was voluntary but the substance's characteristics were unknown (e.g., sold as a "legal high"), it becomes crucial to assess whether the individual was negligent in disregarding generic potential risks.

Therefore, actio libera in causa may be excluded when ingestion occurred in a context where the individual, even with ordinary diligence, could not have foreseen the substance's psychoactive effects and the resultant impairment. This requires detailed case-by-case evaluations, based on toxicological expertise and behavioral analysis preceding intoxication, rendering criminal responsibility assessment in NPS cases particularly intricate. Jurisprudence tends to dismiss "voluntary" or negligent ignorance—i.e., ignorance that could have been avoided with minimal caution—but may accept "inevitable" ignorance as grounds for excluding liability (Art. 47 Criminal Code). Expert assessments must consider the subjective context of ingestion, the actual availability of information about the substance, and the subject's prior behavior. Ignorance of an NPS's effects becomes legally relevant only when it significantly impacts the intentionality, foreseeability, and awareness of the act, constituting a state of non-culpable, non-volitional incapacity.

Case Study 2

Marco, a 38-year-old man residing in a socially disadvantaged urban area, began using cannabis and alcohol at age 16, quickly progressing to cocaine and benzodiazepines. Over the years, he developed a pattern of polysubstance abuse, alternating between intense periods of use and brief attempts at abstinence. He underwent four therapeutic programs, both residential and outpatient, all of which were discontinued due to poor adherence, relapse, and lack of social support. His medical records document a severe, treatment-resistant addiction. A recent neuropsychological assessment, conducted within a reintegration program, revealed impairments in executive functions, pronounced impulsivity, and reduced planning capacity. One evening, after a long day spent wandering, Marco consumed a mixture of alcohol and drugs. In a clearly intoxicated state, he entered a supermarket, stole several bottles, and violently assaulted a security guard with a blunt object during his escape attempt. The guard sustained a compound fracture and cranial trauma. Marco, arrested in a confused state, had no clear memory of the event. He is currently held in pre-trial detention.

This case highlights the limits of the traditional legal notion of «acute intoxication»: can the violent act be solely attributed to the immediate effects of alcohol, or should it be contextualized within a framework of chronic neurobiological alterations resulting from years of polysubstance abuse? Should criminal responsibility be assessed exclusively based on the acute state at the time of the offense, or should the individual's dysfunctional neurobiological profile, which profoundly affects control, awareness, and planning, also be considered?

Addiction and Criminal Responsibility

A growing body of neuroscientific evidence confirms that addiction is a chronic brain disorder, rather than a mere issue of personal choice or lack of willpower. Psy-

choactive substances directly affect the dopaminergic reward system, particularly the mesolimbic circuit, abnormally stimulating dopamine release and reinforcing the association between substance use and pleasure (Volkow et al., 2004). This mechanism profoundly alters motivational circuits and fosters compulsive behavior.

Long-term drug use disrupts the functionality of the prefrontal cortex, the brain region responsible for impulse control, planning, and critical judgment. This explains why individuals with addiction, though often aware of the negative consequences of use, struggle to stop (Goldstein & Volkow, 2011). Another critical factor is pathological neuroplasticity: substances create and consolidate powerful memory traces that sustain craving and relapse, even after prolonged abstinence (Hyman, Malenka & Nestler, 2006). In addition, genetic and epigenetic components contribute: some individuals are biologically predisposed to addiction, and drug exposure can permanently alter gene expression, further chronicling the disorder (Nestler, 2014). Modern neuroimaging techniques, such as functional MRI (fMRI) and positron emission tomography (PET), have confirmed these brain changes, providing visual evidence of structural and functional alterations in the addicted brain (Volkow et al., 2003). Collectively, this evidence establishes addiction as a legitimate neurobiological disease requiring complex, integrated treatment approaches.

Legal Implications of Addiction in Criminal Responsibility

The aforementioned findings demonstrate that individuals with substance use disorders exhibit structural and often irreversible impairments in cognitive and decision-making capacities—even outside episodes of acute intoxication (Goldstein & Volkow, 2011; Hyman et al., 2006). The altered prefrontal cortex significantly reduces their autonomy and capacity for free choice, raising critical questions about moral and legal culpability. Given this, the legal distinction between acute and chronic intoxication - still embedded in many criminal codes- appears outdated. Increasingly, legal scholars and clinicians advocate for shifting the focus from assigning blame to providing medical intervention, even mandating treatment where appropriate.

Significant literature (e.g., Lacey & Pickard, 2012) argues against the tendency to generalize neuroscientific findings, cautioning against conclusions drawn from the average capabilities of people with substance dependence. A substantial subgroup of long-term, treatment-resistant addicts may be considered as significantly constrained in their decision-making, lacking real opportunities for self-regulation or access to effective treatment. Holding them fully responsible for conduct stemming from such impairments may be ethically and legally unjustified.

At the same time, suggesting that addiction should offer a full defense for serious criminal behavior - especially where harm to others is involved- is equally untenable. This leads to the pressing question of what alternative dispositions courts should consider.

Lacey and Pickard's concept of "responsibility without blame" offers a compelling framework. They argue that recognizing and engaging the residual agency of individuals with addiction is essential for therapeutic recovery and societal reintegration. However, assigning blame undermines this process by reinforcing feelings of inadequacy and failure. Their approach seeks to preserve the notion of agency while fostering personal responsibility in a non-retributive, forward-looking legal paradigm. This Kantian-inspired model focuses on respect for persons, promoting agency by holding individuals accountable without condemning them.

In conclusion, the assessment of criminal responsibility in cases involving substance abuse remains a complex and nuanced domain that requires careful integration of clinical, legal, and ethical perspectives. The two forensic cases presented underscore the variability in outcomes depending on national legislation, psychiatric evaluation, and the interpretation of diminished responsibility. The comparative international review further underscores the need to harmonize forensic criteria and to foster more effective interdisciplinary dialogue among mental health professionals, forensic medicine experts, toxicologists, and the judicial system. Future directions should include the development of scientifically grounded, evidence-based protocols to guide forensic assessments and policymaking in criminal cases related to substance use.

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Casistica

Dissociative identity disorder in forensic field: Case report and literature review

Rosario Barranco | Alfredo Verde | Claudia Colombo | Gabriele Rocca

Abstract

Dissociative identity disorder is characterized by the disintegration of identity into two or more distinct personality states and the inability to recall everyday events, important personal information, and/or traumatic events. The distinctive elements, which constitute the core symptoms of the disorder, are identity confusion, identity alteration, and amnesia.

We present the case of a 47-year-old man who contacted a hitman to kill his wife's mother-in-law. After being arrested, the man claimed to know nothing about the affair and to be possessed by his father-in-law, who had died a few years earlier in a car accident. According to the defendant's narration, the father-in-law possessed the man and planned the death of his daughter and wife in revenge. A forensic psychopathological evaluation was performed to determine whether the man was suffering from DID or whether he was simulating possession.

the assessment of these cases remains a very complex challenge from a medico-legal point of view and for court decisions. The assessment of the patient should be carried out by several independent psychiatrists by means of multiple tests (i.e. Dissociative Experiences Scale, Dissociative Disorders Interview Schedule, self-assessment questionnaires, analysis of verbal and non-verbal behaviour) and a multidisciplinary approach. In this way, an evidence-based approach can be developed to answer the fundamental question: how to distinguish real pathology from a simulation?

Keywords: Dissociative identity disorder; Forensic Medicine; Forensic Psicopathology; Malingering; Psycho-forensic analysis

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Dissociative identity disorder in forensic field: Case report and literature review

Introduction

Dissociative identity disorder (DID) is introduced in the DSM-III as multiple personality disorder and it is characterized by the disintegration of identity into two or more distinct personality states and the inability to recall everyday events, important personal information, and/or traumatic events. The distinctive elements, which constitute the core symptoms of the disorder, are identity confusion, identity alteration, and amnesia (Steinberg, 1994).

According to the DSM-5, the dissociative personality disorder is characterized by two or more distinct personality states or an experience of possession, recurrent episodes of amnesia, recurrent and unexplained intrusions into one's conscious functioning and identity, alterations of self-sense, bizarre changes in perception; intermittent neurological symptoms (APA, 2013).

Dissociative identity disorder has a complex etiology, characterized by the combination of factors such as a history of trauma, the ability to activate dissociative processes, psychosocial conditions, and social characteristics of the construction of the self (Dorahy et al., 2014). In DID, traumatic information is stored in different parts of the identity, the so-called «alter» (Kabane, 2022).

In this sense, Kluft (1984) identifies four key factors:

Ability to implement dissociation as a defensive strategy against the experience of past trauma;

Presence of a shocking and overwhelming traumatic experience that cannot be managed with normal coping strategies and other defensive operations;

Peculiarities of the influences and substrates available in determining which form of dissociative defense will be implemented in the formation of the other personality or personalities;

Absence of reassuring and restructuring contacts with significant figures.

Frequent, in particular, are patients who report having experienced emotional, physical and sexual abuse and neglect during childhood. Therefore, the literature underlines the link between DID and severe and chronic childhood traumatic experiences (Dorahy et al., 2014).

However, trauma alone is not sufficient to cause the disorder: in addition to the overwhelming experience that exceeds the child's coping capacities, the child must be able to implement a repeatable dissociative defense strategy, which, over time, determines the definition of autonomous identities that will take shape according to the context and the needs of the subject. At greater risk are children who are particularly imaginative or easily hypnotizable, so that if they are subjected to situations of great stress, these conditions can be diathesis for the development of DID (Hooley et al., 2017).

Dissociative identity disorder can be expressed with or without possession, and it is cultural factors that determine which of the two manifestations will take over. Generally in Western societies, where an individualistic conception of the individual, autonomous and independent prevails, we find subjects who develop internal dissociation. On the other hand, in non-Western cultures, oriented towards the interdependence of the self and the perception of one's own identity with respect to the expectations and needs of others (Dorahy et al., 2014), the dissociative experience can take the form of external possession by generally supernatural forces, which reflect the cultural and religious background of reference.

Dissociation not only determines the specific diagnosis of dissociative disorders, but is also a condition that accompanies multiple psychiatric illnesses, and which influences their phenomenology and treatment (ar, 2016). In particular, there is a link with depressive disorders, post-traumatic stress disorder, substance use disorders, borderline personality disorder, panic disorder, and psychotic disorders.

DID is a highly debated topic in the forensic and court setting. However, there are no clear indications and what has been published so far does not always meet scientific requirements. The diagnosis of DID has been used as a possible defense element in both civil and criminal contexts. In particular, in the criminal context, a defendant may argue that their dissociative conditions make them not guilty by reason of mental illness. Dissociated experiences during criminal behavior can, therefore, be considered mitigating evidence to reduce the level of criminal intent or the duration of the sentence (Scott, 2022).

The lack of specific diagnostic criteria in the DSM-5 and ICD-10 makes it very difficult to distinguish between dissociative identity disorder and simulation of the same.

We present the case of a 47-year-old man who contacted a hitman to kill his wife's mother-in-law. After being arrested, the man claimed to know nothing about the affair and to be possessed by his father-in-law, who had died a few years earlier in a car accident. According to the defendant's narration, the father-in-law possessed the man and planned the death of his daughter and wife in revenge. A forensic psychopathological evaluation was performed to determine whether the man was suffering from DID or whether he was simulating possession.

Case report

A 47-year-old man was arrested on charges of planning the double murder of his wife and mother-in-law. The criminal plan was taken over by the hitman who was hired to commit the double murder by simulating a car accident. The idea was to push the car with the two women into a slope. After the hitman's statements and confession to the police, environmental and telephone wiretaps were carried out. On the day of the arrest, the man declared himself innocent and completely unaware of the facts, despite the evidence against him. On the day of interrogation, the defendant told of feeling the presence of his deceased father-in-law and began to speak as if possessed by his spirit. According to the statement during the apparent state of possession, the deceased father-in-law took possession of his son-in-law's body in order to plan the death of his wife and daughter for reasons of personal revenge. According to this version, the man under investigation was unaware of the murderous plan.

Therefore, a forensic psychiatric evaluation was performed to determine whether the man was suffering from DID or was faking it.

Four psychodiagnostic interviews, a remote meeting with the offended parties, as well as the study of the documentation, the subject's custodial clinical diary and the analysis of the results of the psychodiagnostic tests administered (MCMI and MMPI-2) were carried out.

According to the psychoforensic investigation, the man had had a peaceful childhood and his father's death occurred during his university studies. He subsequently met his future wife whom he married three years later. The wife's family was close to a subculture of esotericism, the occult and superstition. Several years later his father-in-law (on bad terms with his daughter and ex-wife) died in a car accident. Following the dismissal and continuous family stress, the defendant began to suffer visions of his wife's grandmother (a positive figure with reassuring messages) and his father-in-law (a harsh and hostile presence, threatening and foretelling the death of his daughter and ex-wife respectively). According to the man's statements, the visions and possessions occurred when he was alone or in the exclusive presence of his wife and mother-in-law.

The suspect reported that the possessions lasted a few minutes and constituted a mental blackout. The event of possession always presented itself in a similar manner: at first, the man was possessed by his father-in-law, who threatened the two women with death; then, his wife's grandmother intervened, who had a benevolent attitude and promised to fix all the problems.

During the investigation, several contradictions emerged in the man's account: on one occasion he exposed the experience of possession as if he was conscious and aware of what was happening, while at other times he claimed to be suffering a mental blackout. During the interrogation he reported a premonition of the impending intrusion, but later the man declared his total unpredictability and inability to foresee the moments of trance.

Furthermore, according to the investigation, the deceased father-in-law did not know the hitman involved and on some occasions the defendant contacted the hitman simultaneously with messages and phone calls to other persons.

The man could not explain how he had never been aware of the relations with the hitman and of the large withdrawals of money made to pay the down payment. Furthermore, the defendant had never realised that he had the maps and photographs handed over to the hitman in his car.

Finally, according to the victims' statements, the belief in the occult arts was more characteristic of the defendant, clearly reversing the position of the man who always maintained his scepticism in his statements.

According to the analyses performed, the defendant did not suffer from psychiatric pathology and was of sound mind at the time of the commission of the crime. The man was considered capable of standing trial with full compatibility between his health and the detention regime in a prison environment. What happened was interpreted as an attempt of simulation to exclude or reduce the sentence.

Discussion

Distinguishing between genuine dissociative disorders and malingering is a significant challenge in forensic settings (Brand 2017a, 2017b). Malingering refers to the intentional presentation of exaggerated or false physical or psychological symptoms to obtain personal gain (Walczyk et al. 2018; American Psychiatric Association 2013).

Malingering in forensic contexts has detrimental consequences, leading to increased costs within the criminal justice system (Walczyk et al. 2018).

Simulating dissociation is relatively easy, and there is a concerning overlap between simulated symptoms and dissociative phenomena (Merckelbach, 2017).

Structured interviews, personality inventories, questionnaires, and scales can be employed to differentiate between malingering and genuine dissociative disorders (Lanfranco et al., 2023). The Minnesota Multiphasic Personality Inventory (MMPI/ MMPI-2) can identify specific psychometric signs (Lanfranco et al. 2023).

The Personality Assessment Inventory (PAI) includes valuable tools like the malingering index (MAL), rogers discriminant function (RDF), and Negative impression (NIM), which are useful questionnaires for distinguishing between malingering and pathology. RDF has high sensitivity for DID patients, while RDF and MAL have high sensitivity for malingering (Lanfranco et al. 2023; Roger et al, 2012).

A recent scientific study identified helpful indicators for distinguishing between dissociative disorders and simulated conditions (Pietkiewicz et al, 2021). The differentiation should be sought in the subjects' internal dynamics and psychological mechanisms (Pietkiewicz et al., 2021)

rather than in the observed symptoms. Individuals with dissociative identity disorder typically try to conceal their condition and manage their daily lives by avoiding the resurfacing of traumatic experiences or the exposure of dissociative symptoms. Consistent with most psychiatric patients, individuals with DID are reluctant to report their symptoms and feel embarrassed by identity intrusions. In contrast, simulators enthusiastically recount their experiences, often in an exaggerated manner, visibly aimed at convincing others of the genuineness of their conditions. Regarding amnesia, individuals with DID often are unaware of amnestic episodes or try to ignore having performed actions they have no memory of, fearing being overwhelmed by disturbing memories. Simulators, on the other hand, often use amnesia to justify their behaviour or seek attention.

In presenting themselves and recounting their stories, simulators would always use the first person, with an absence of depersonalization traits and an exaggerated willingness to describe in detail. Finally, simulators generally discuss their disorder in clinical terms, suggesting a prior thorough search for information.

However, it is crucial to pay particular attention to the evaluation of validity scales indicative of malingering/exaggeration, especially in previously traumatized individuals (especially in the context of reported childhood traumas and/or high dissociative symptoms) (Brand et al., 2021; Elhai et al., 2001; Klotz et al., 2003).

Several approaches have been used in forensic settings for forensic assessment. The «alter in-control» approach considers the mental state of the identity of the alter that was in control when the violation was committed. In the «each-alter» approach, all alternate identities are assessed for accountability for the crime. Finally, the «host» approach examines whether the host personality was not capable of assessing the nature and quality of the alter's conduct (Kabane, 2022).

Saks (1995) proposed a theory of non-responsibility for individuals with DID, considering the identities within a person as separate and arguing that the Court should not consider a DID patient guilty unless all existing identities within are involved in a crime. The assumption is that if an individual acts under the influence of an «alter,» then the mental disorder may have interfered with culpability (Paris, 2019).

While dissociative disorders can undoubtedly affect memory, it is debatable whether complete amnesia can occur or whether there are exclusively responsible «alters» (Paris, 2019).

In recent decades, the established diagnosis of dissociative identity disorder (DID) has been increasingly rejected as a defense in legal proceedings. This stems from several factors, including the questionable status of DID as a mental illness under the M'Naghten Rules and concerns regarding its scientific validity.

One of the reasons why DID has been rejected by the courts as a defence in recent decades is the strong social response and the enormous controversy that arose after the first not guilty verdicts (Kabane, 2022). There is also scepticism about the scientific reliability of the DID diagnosis method, and in the era of evidence-based practice, it is very difficult for courts to recognize not guilty verdicts based on diagnoses that cannot be fully verified with scientific rigor (Paris, 2019).

Particularly in the US and in recent decades, the diagnosis of DID has been proposed as an element of the defendant's defence.

One of the first cases occurred in 1978 (State v Milligan, 1978) in which a man was acquitted by reason of insanity after raping, assaulting, and robbing three college students. This court decision sparked strong controversy and upset public opinion for years.

In 1979, Juanita Maxwell brutally beat and suffocated a man to death, but the woman was found not guilty because she suffered from DID with six different identities. Years later, the woman was arrested again for two bank robberies and claimed that this happened because she did not receive adequate treatment. (Kabane, 2022).

Subsequently, in several cases of murder (State v Darnell 1980, State v Jones 1988, State v Greene 1998), drunk driving (State v Grimsley 1982), and rape (State v Lockhart 2000), the defense based on the alleged diagnosis of DID was completely unsuccessful.

An emblematic case is that of Thomas Huskey, who raped and killed four women in Knoxville between 1991 and 1992. Recordings during the crimes revealed a completely different vocabulary, tone, and manner of speaking (Haliman, 2015). However, the forensic psychological assessment concluded that the man was a simulator and had a great ability to manipulate people.

In the case of Goering Orndorff (Nakic and Thomas 2012), the woman killed her husband and modified the crime scene to appear her actions as self-defence. During the trial, she was diagnosed with DID, but it later emerged that she had simulated the psychiatric condition to invoke insanity.

Even in the present case report, there are numerous contradictions and unclear aspects that raise doubts about the validity of the DID claim.

One first element of contrast can be found in the way the disorder is presented. Psychiatric patients with DID have a tendency to hide or minimize their condition, trying to live their daily lives avoiding all those situations that could trigger the dissociative response. This tendency also extends to the interview with the clinician, with whom patients feel embarrassed to report their symptoms and ashamed of the intrusions they are forced to undergo. The discomfort is accompanied by a strong internal conflict, expressed through intense negative emotions, small involuntary facial movements, and/or changes in tone of voice.

In the case presented, the manner in which the man recounts his experiences of possession departs from this model. He recounts his experience of dissociation without any qualms and going into detail. He manipulates the discourse not to avoid the subject, but to insist on the pres-

ence of the disturbance, even when recalling its existence is useless for the expert's questions, and on his suffering. He says he is embarrassed by his condition, his tone of voice, style of speech, and bodily posture suggesting more the intent to pity the listener, he blinks remembering the terror he feels towards his mother-in-law (behaviour quite different from the almost imperceptible changes in facial features) or he reveals the discomfort given by the impending intrusions with moans such as 'you are here too, no please'. Rather than concealing the disturbance, the man appears nagging and exuberant, repetitive in recounting episodes in which he describes himself without a shadow of a doubt as a victim, and with a certain ability to deflect uncomfortable questions by invariably falling back on the subject of his own suffering.

With regard to the stability of the disorder over time and, above all, the solidity of the structure and content of the intrusive entities, one could at first reading confirm the proximity with the DDI. According to his narrative, the suspect has been afflicted by the disorder for three years continuously and quite pervasively. The structure and characteristics of the entities invading his consciousness are established and fixed, as are their attitudes and demands, which remain unchanged regardless of external influences, and their distinct, non-overlapping figures. Here, too, however, there seems to be an overlap: firstly, the man's disturbance changes seemingly without reason from hallucinatory symptoms, with the visions, to symptoms of possession. Although, moreover, the characteristics of the two spirits are indeed stable, they are never presented as autonomous entities, but rather as extensions of the suspect's recollection of the two figures in such a way as to give the two subjects functional and easy-to-manage goals and characters. The father-in-law is the evil spirit, the one who points towards death; the ex-wife's grandmother is goodness and salvation: in this way the man surrounds himself with two figures with such generic characters that, depending on the circumstances, he can exploit them to justify any of his behaviour. This is how the crime itself can be read: Ettore's cruelty is what sets up the criminal design, Laura's goodness is what allows the investigators to uncover the diabolical plot and arrest the man before he can commit something terrible.

A further element to be emphasised is that the DID in a timeframe too short for the onset of psychiatric pathology. According to the man's narrative, the only relevant event was the dismissal that occurred three years before the murder plot. The impact of this event would have to be specifically assessed in relation to all the conditions of the subject, lifestyle consequences, social consequences, economic consequences, psychological impact, presence or absence of a support network, individual response to stress, etc.

A previous study (Orne et al., 1984) identified another element of fundamental importance in defining the simulation, namely the testimony of persons close to the subject in support of the pathology. Unfortunately, we do not have the testimony of Andrea's mother and sister, who could certainly offer a complete overview of the subject's life history and the presence of any pathology. His wife and mother-in-law did not report the presence of visible disorders, nor did they report unexplained changes in identity and behaviour, or intermittent amnesia. The only noteworthy reports concern the man's behaviour in the last few months and days before the arrest, in which he is described as particularly tired, detached, and with more bizarre behaviour than usual.

Overall, this case psycho-forensic analysis clearly demonstrates the defendant's attempt at simulation through the analysis of his personal narrative.

The study of the offender's narratives must take into account certain fundamental factors: a) the individual sphere and personal life history of the subject, and in this regard we can refer to what Canter (1994) defines as the 'inner secret narratives' that lead the subject to commit a crime and that the criminologist must study in order to understand how the life stories end up being reflected in the criminal act; b) the macroscopic framework in which the subject and the narrative fit in; c) the presence of an interlocutor, who conditions the narrative.

Bearing these three aspects in mind, it is possible to state that the subject constructs the narrative of the crime from his or her own personal history, adapting it in such a way as to be acceptable in relation to the context of reference and the interlocutor at the time. The narrative, therefore, is never a neutral account of the facts: on the contrary, it is dictated by the subject's need to integrate an element of rupture (the crime) into his or her personal history and the social context to which he or she belongs, elaborating a discourse to justify his or her actions. In this case, the narrative provided by the man, in fact, can be said to be characterised by a plus of narrative 'which is often placed at a level of substantial mystification with respect to oneself and to others, both with respect to the victims of the crimes and to those who subsequently demand that the offender tell about himself and his crime' (Green, 2016).

The construction of the narrative in the offender can be outlined as a defence mechanism used by the subject to cope with and minimise the distress that the crime itself has created. In our case, we can note the use of at least a couple of neutralisation techniques, which we term responsibility denial and victim denial (Sykes in Matza, 1957).

Denial of responsibility is characterised by exoneration by attributing one's behaviour to causes or forces beyond one's control. It is not the suspect who is guilty, but others who are responsible for his actions. Although in the two sociologists' theory the denial of responsibility refers to the unfavourable social circumstances in which the offender finds himself, it is possible to rearrange this technique to our case by identifying as a force beyond one's control that of the father-in-law, whose evil spirit possesses the man. Several times in his narrative, the offender denies

being aware of the state of possession, and all the more so of the behaviours enacted in those circumstances, which are completely beyond his power.

The victim's denial, on the other hand, is an attempt to overturn the accusations towards the victims, who are described as deserving of the act, insofar as they were the instigators of the instigating behaviour that led to the crime. The suspect's exasperating recriminations against his wife and mother-in-law, with the often out-of-context references to the battering he was constantly subjected to, are framed here. In fact, the man never seems to recognise his wife and mother-in-law as victims: on the contrary, with their nagging and hostile behaviour, they are pointed at as the culprits of the visions and possessions he is forced to endure.

Moreover, the victims are characterised by naivety about the motives that drove a subject to commit a crime; as well as a tendency to define the speaker in terms of similarity or, more often, dissimilarity to the offender. In recounting the events of the last few months, the two women emphasise the offender's bizarre behaviour, such as the fact that he often feels he is being watched, his frequent state of obvious nervousness, and his new disturbing passion for cemeteries; they state that they see him as strange, so much so that they have advised him to undergo some medical examinations. They report the emotional detachment that the man showed in recent times, as well as the tendency to frequent the marital home less and less. All this, underlining not only the man's change from the past, but the profound difference between him and them.

We can imagine that the two women wanted to describe a situation that, on the one hand, would put them in a position of total innocence with respect to the accusations with which the suspect's narrative is laden; and on the other hand, would aim to point out the distance that now separates them from the man, who is different from them and from the normal husband and son-in-law they have always known

Narratives alone cannot provide an explanation for the criminal act: it is undeniable, however, that they provide a number of useful clues for understanding the crime and the offender himself. From the examples we have chosen to present, it clearly emerges how, especially with people's narratives, and even more so with the discourses produced by the offender, the criminologist must always bear in mind that he or she is analysing biased narratives, which are influenced by the social and cultural context of reference, the situation and the interlocutor.

In conclusion, the assessment of these cases remains a very complex challenge from a medico-legal point of view and for court decisions. The assessment of the patient should be carried out by several independent psychiatrists by means of multiple tests (i.e. Dissociative Experiences Scale, Dissociative Disorders Interview Schedule, self-assessment questionnaires, analysis of verbal and non-verbal behaviour) and a multidisciplinary approach. In this way, an evidence-based approach can be developed to answer the fundamental question: how to distinguish real pathology from a simulation?

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Casistica

A report on the criminal responsibility of offenders with intellectual developmental disorders

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Abstract

Intellectual Developmental Disorder (IDD) encompasses deficits in intellectual and adaptive functioning across various domains with heterogeneous clinical manifestations and different behavioral impacts. Functional impairments are now more important in the diagnostic criteria for DSM than IQ scores, which indicates a greater understanding of IDD. Forensic psychiatry faces challenges when it comes to assessing the criminal responsibility of a defendant with IDD, especially in cases where the alterations may be mild and heterogeneous but have a strong impact on criminal behavior. We present two notable cases of individuals with mild intellectual disability who committed various crimes, which emphasizes the complexities of forensic evaluations in this context. A 22-year-old man is charged with computer fraud in Case 1. The man's behavior, characterized by organized fraud driven by frustration and social isolation, shows significant deficits in adaptive functioning and social interactions. Case 2 is about a man who was charged with stalking and displayed impulsive and disorganized behavior, which was related to deficits in social cognition and persecutory delusional ideas. We used the Defendant Insanity Assessment Support Scale to retrospectively analyze the cases and assess key dimensions of criminal responsibility, such as knowledge of the crime, appreciation of its nature, reasoning, and control over behavior. The evidence suggests that even minor intellectual impairments can significantly impact overall functioning and criminal behavior, requiring thorough evaluations incorporating medical, criminological, and functional perspectives.

Keywords: Intellectual developmental disorder, criminal responsibility, DIASS, forensic evaluation, IQ
Disturbi dello sviluppo intellettivo, imputabilità, DIASS, valutazione forense, QI

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A report on the criminal responsibility of offenders with intellectual developmental disorders

Introduction

The DSM-5-TR Intellectual Developmental Disorder (IDD), previously referred to as Intellectual Disability (ID), describes a condition that begins during the developmental period and involves deficits in intellectual and adaptive functioning across conceptual, social, and practical domains (American Psychiatric Association, 2022). Based on DSM-5-TR prevalence rates, IDD has an overall general population prevalence of approximately 10 per 1,000; however, the global prevalence varies by country and level of development, being approximately 16 per 1,000 in middle-income countries and 9 per 1,000 in high-income countries (Nair et al., 2022). While the diagnosis was primarily based on IQ scores below 65-75, it now emphasizes deficits in adaptive functions such as problem-solving, judgment, interpersonal communication, and behavioral control (American Psychiatric Association, 2022). This shift takes into account the limitations of only relying on IQ scores, which may not adequately capture the actual functioning and practical and social challenges faced by individuals with IDD. By focusing on adaptive functioning, the current diagnostic criteria provide a more comprehensive understanding of the individual's abilities and needs, improving the accuracy and relevance of diagnoses in clinical and forensic settings (Tassé et al., 2012; Schalock et al., 2010).

Several studies indicate that individuals with IDD may be more likely to commit certain offences, such as violent and sexual crimes, compared to individuals without IDD (Edberg et al., 2022; Latvala et al., 2023). Compromised judgment, limited adaptive capacities, and lifestyle-related risk factors, such as socioeconomic disadvantages, communal living arrangements, educational limitations, and prior abuse, including sexual victimization, could lead to this tendency(Griffiths & Fedoroff, 2014). Aggressive behavior is frequent among adults with IDD, and it can be attributed to different biological, psychological, social, developmental, and environmental factors (Ali et al., 2015; Jones et al., 2008). Recent studies have highlighted that individuals with intellectual disabilities also suffering from psychoses or mood disorders are at a higher risk of being charged with crimes compared to those without comorbidities (Hauser & Kohn, 2024; Rossa-Roccor et al., 2020; Thomas et al., 2019).

Deficits in social interaction resulting from intellectual disability can impede the development of adaptive behaviors, heightening the risk of emotional dysregulation and socially deviant conduct (Rossa-Roccor, Schmid, Steinert 2020; Plesa Skwerer, 2017, pp. 91-161).

Intellectual developmental disorders present significant challenges in forensic psychiatric assessment (Edberg et al., 2022) . The difficulty is particularly marked in mild forms, where impairments in reasoning, social functioning, and behavioural regulation may be subtle, variable over time, and not readily apparent during examination (Lindsay et al., 2013; Søndenaa et al., 2008) . The presence of comorbid neurodevelopmental disorders—such as autism spectrum disorder (ASD) (Barlattani et al., 2023) or attention-deficit/hyperactivity disorder (ADHD) (Billstedt et al., 2017; Taylor & Lindsay, 2018) —further increases the complexity of these evaluations. In such contexts, the interpretation of clinical findings and their relevance to the alleged offence may be more susceptible to cognitive biases already described in the forensic psychiatric literature, which in turn can contribute to the variability of expert opinions and, in some cases, to a low inter-rater agreement in determinations of criminal responsibility (Acklin et al., 2015; Gowensmith et al., 2017; Kunkler & Roy, 2023).

The Defendant's Insanity Assessment Support Scale (DIASS) (Parmigiani G, Mandarelli G, Meynen G, Carabellese F, Ferracuti S) was introduced to guide the evaluation of the possible link between psychiatric disorders and criminal acts. The DIASS moreover enhances the transparency of the forensic assessment by focusing on four dimensions of criminal responsibility: "Knowledge/understanding of the crime", "Appreciation of the crime", "Reasoning", and "Control of voluntary motor activity".

Two Italian cases of individuals with mild IDD who committed crimes are presented in this report. Defendants with severe/profound IDD are usually not considered to be criminally responsible, but those with mild/moderate severity need more complicated forensic psychiatric evaluation and reasoning. The subjects in both cases affected by IDD are seen as perpetrators of different crimes with different psychopathological components. We applied the DIASS to retrospectively analyze the cases and assess key dimensions of criminal responsibility, such as knowledge of the crime, appreciation of its nature, reasoning, and control over behavior.

Cases presentation

Case 1

A 22-year-old man has been charged with computer fraud for issuing fraudulent debit orders to multiple organizations while posing as law enforcement, providing

his own IBAN to secure personal financial gain. Due to the method by which the crime was committed and the defendant's positive psychiatric history, the court requested a forensic psychiatric assessment. The defendant was diagnosed with "Nonspecific Learning Disorder" and "mild to moderate Intellectual Disability" in childhood. Later, tic-like symptoms, coprolalia, and repetitive behaviors were observed and initially suspected to be linked to Gilles de la Tourette syndrome but then attributed to an obsessive etiology. Treatment with antipsychotics (Aripiprazole, Risperidone) and anxiolytics (Benzodiazepines) was administered by a neurologist and psychiatrist, with partial therapeutic efficacy. The defendant has no family history of psychiatric conditions and did not complete a high school diploma, although he had the support of a special education teacher.

Additionally, he reported a current and past absence of interpersonal relationships. During the forensic psychiatry assessment, the patient exhibited signs of stress, emotional isolation, mood deflection, irritability, nervousness, flattened affectivity, and low adaptive behavior levels. He demonstrated an understanding of his wrongdoing but lacked awareness of the legal consequences, attributing his actions to deep-seated anger. The defendant has undergone multiple Wechsler Adult Intelligence Scale - IV (WAIS-IV) (25) evaluations over the years, resulting in non-overlapping IQ scores - an IQ of 74 in 2014, an IQ of 74 in 2015, and an IQ of 49 in 2018. A psychodiagnostics evaluation, including the WAIS-IV, Vineland-II - Adaptive Behavior Scales, Second Edition (Vineland-II) (25), and Autism Diagnostic Interview-Revised (ADI-R) (26) was requested by the forensic expert and indicated an I.Q. score of 54 at WAIS-IV and 74 at Vineland-II suggesting slightly below-average intellectual functioning and moderate adaptive behavior deficits. The diagnosis performed with the ADI-R revealed an Autism spectrum disorder with concomitant intellectual impairment. The forensic psychiatric evaluation concluded a substantially diminished criminal responsibility due to his neurodevelopmental and intellectual impairments with a recommendation for non-custodial security measures, such as probation, along with therapeutic interventions to address his mental health and mitigate social dangerousness.

Case 2

A 33-year-old man has been charged with stalking because he repeatedly engaged in conduct that harassed a neighbor, including leaving several insulting and nonsensical notes near her apartment's entrance, stealing the doormat, damaging the mailbox, hitting the apartment door with kicks and a ceramic knife, and tampering with a security camera to cause fear. These actions led to a justified fear for the neighbor's safety, forcing her to alter her lifestyle. From early childhood, the patient exhibited delays in language development, difficulties in social interaction, and behavioral disturbances and was diagnosed by territorial psychiatric services with ADHD, mild intellectual disability (IQ = 60), and Persecutory Delusional Disorder. Pharmacological treatment with mood stabilizers (Valproic Acid), antipsychotics (Aripiprazole), and Methylphenidate initially showed clinical improvement. However, Methylphenidate was later discontinued due to irritability and subsequent rebound effects, including impulsive behaviors. In adulthood, he has been under the medical care of the Adult Disability Center, and an administrator has been appointed to support him. The defendant has no family history of psychiatric conditions and did not complete a high school diploma, although he had the support of a special education teacher. Finally, he reported a current and past absence of interpersonal relationships. During the forensic psychiatric assessment, the patient displayed signs of stress, moderate internal tension, and severe communication difficulties. He exhibited delayed responses and inconsistent recognition of the forensic expert's role. Family member's involvement was needed to verify the provided personal and clinical information, as the defendant exhibited a vague, circumstantial, and contradictory communication style. The criminal behavior appears rooted in his clinical presentation, characterized by deficits in social cognition, limited coping strategies, and maladjustment. The forensic psychiatric evaluation concluded a substantially diminished criminal responsibility with a recommendation for non-custodial security measures, such as probation, along with therapeutic interventions to address his mental health and manage social dangerousness.

Defendant's Insanity Assessment Support Scale (DIASS)				
	Case 1		Case 2	
Defendant's mental state evaluation at crime time	Present	Absent	Present	Absent
Epistemic Component				
Knowledge / Understanding				
A1. Crime context	X			X
Appreciation of the criminal behavior				
B1. Subjective moral standard		X	X	
Reasoning				
C1. About possibility of non-acting/alternative choices		X	X	
C2. About consequences (pros and cons)		X		X
C3. Integration of relevant information	X		X	
Control component				
Control of voluntary motor activity				
D1. Ability to inhibit one's own behavior		X		X
D2. Ability to program, organize, finalize the action		X	X	
Knowledge / Understanding				
A3. Criminality of the act and moral standard		X		X

Case 1	
Epistemic component	**Control component**
□ Intact **X** Partially compromised □ Compromised	□ Intact □ Partially compromised **X** Compromised

Case 2	
Epistemic component	**Control component**
□ Intact **X** Partially compromised □ Compromised	□ Intact **X** Partially compromised □ Compromised

Table 1: Analysis of both described cases using DIASS

Discussion

The intellectual developmental disorder is a heterogeneous condition with multiple possible causes and associated difficulties with social judgment, risk assessment, behavior self-management, emotions, interpersonal relationships, and motivation in school or the work environment (American Psychiatric Association, 2022). Individuals with IDD may exhibit impulsive and solitary behaviors that can lead to offending, but they are also at risk of becoming victims themselves (Díaz-Faes et al., 2023; Martí-Agustí et al., 2019; Neimeijer et al., 2021). In general, because of a lack of awareness of risk and danger, individuals with IDD may have a higher likelihood of committing crimes, with a prevalence of 4–10% in criminal populations (Edberg et al., 2022; Latvala et al., 2023). Those with severe and profound intellectual disabilities tend to exhibit criminal behavior characterized by unpredictability and aimlessness, often resulting in chance-driven outcomes (Fogden et al., 2016).

In the presented cases, the defendant in case 1 underwent three WAIS-IV evaluations (74 in 2014, 74 in 2015, and 49 in 2018) before the forensic psychiatric evaluation, resulting in an IQ score of 54. Meanwhile, the defendant in case 2 only had one WAIS evaluation, reporting an IQ score of 60.

Both cases showed mild to moderate intellectual disabilities and significant challenges in social interactions and adaptive behaviors. In particular, the defendant in case 2 showed impulsive criminal behavior motivated by

a desire for interpersonal relationships, and the repeated crimes were driven by intense anger, frustration, and egocentrism, impairing his judgment and understanding of his actions' moral and social consequences. Conversely, the defendant in case 1 displayed more solitary conduct driven by anger and frustration, a stress-related response seemingly exacerbated by motor tics with difficulties in social understanding, egocentrism, and maladaptive coping strategies, worsened by feelings of rejection and frustration.

In both cases, even minor alterations of cognitive functioning may have significantly reduced overall functioning, which was a crucial factor for forensic experts to consider in their assessments. Moreover, evaluating criminal responsibility in individuals with intellectual and developmental disabilities presents significant challenges for forensic psychiatric assessments because of the risk of underestimating or overlooking crucial qualitative aspects necessary for a thorough analysis, leading to potential misjudgments (Aga et al., 2020; Fogden et al., 2016). In general, despite established legal criteria, the reliability and objectivity of insanity evaluations have been widely questioned because of the frequent disagreement among forensic experts regarding the same case (Parmigiani et al., 2022).

Both defendants lack interpersonal relationships and employment, relying on their families for financial support. In particular, the defendant in case 1 has a complex neuropsychiatric profile with organized, purposeful, and recurrent criminal behaviors attributed to significant adaptation issues and maladaptive coping strategies. His actions were influenced by intense anger and frustration, impulsive symptoms, and egocentrism, impairing his ability to fully understand his actions' moral and social consequences. While his intellectual disability may have contributed to impairing his judgment, it is not the sole cause of his criminal behaviors. Case 1's defendant's clinical condition presents a risk for further unlawful behavior, requiring a non-custodial security measure and mandatory participation in a therapeutic, rehabilitative program.

Also, the criminal behaviors attributed to the defendant of case 2 are closely related to the clinical characteristics presented by the defendant, as they express significant difficulties in social interactions, including deficits in understanding others' thoughts, feelings, and experiences and in adequately interpreting social cues. These deficits lead the defendant to engage in inappropriate and dysfunctional behaviors, with a certain ease in acting out. The criminal behaviors are, therefore, attributable to the defendant's reduced and dysfunctional coping strategies and overall maladaptation. As stated by the defendant himself, he experienced feelings of profound anger and frustration due to the perceived rejection in establishing relational contact with the same individual, which he managed through a dysfunctional stress response mechanism, namely by committing the criminal behaviors in question, believing that these actions could reduce his levels of anger and frustration. This can be further associated with substantial egocentrism, which, as in the present case, prevented case 2's defendant from fully understanding the meaning and disvalue of his actions and from thoroughly evaluating their consequences, particularly from a legal standpoint. In other words, case 2 had a significantly limited ability to manage his internal experiences through alternative behaviors. For these reasons, his mental condition significantly diminished, though it did not wholly exclude his capacity to understand and will. The criteria for mental incapacity are not met, as there is no evidence of delusional ideas on the victim, absolute impulse control loss, or a degree of intellectual deficit so severe that it would prevent the defendant from even marginally understanding the meaning of his actions. The defendant in case 2 has a severe clinical condition, leading to social isolation, anger management issues, and a risk of further unlawful behavior due to a lack of internal resources and adaptive capacities. This condition of a mild to moderate level of social dangerousness has been addressed through a non-custodial security measure requiring mandatory participation in a therapeutic, rehabilitative program provided by local services.

To summarize, both cases highlighted the diminished but not entirely excluded criminal responsibility due to their mental conditions, necessitating non-custodial security measures and mandatory therapeutic interventions to address their social dangerousness and promote rehabilitation.

Both cases were evaluated using the DIASS, an instrument that assists forensic experts in identifying which capacities relevant to mental criminal responsibility were present during the offense (Parmigiani et al., 2022). The instrument provides traceability, transparency, and reliability, reducing potential disagreement among experts regarding the same case (Parmigiani et al., 2022). The application of DIASS in case analysis enables to improve the assessment by evaluating various dimensions of each case. Contrary to initial expectations of finding an impaired epistemic component with an intact control component, we appreciated that even the ability to exert control could be compromised in these individuals with mild intellectual disability. For instance, in case 2, the control component is impaired, while the epistemic component is partially compromised. In case 2, the patient cannot inhibit behavior, program, organize, and finalize actions. The criminal conduct displayed was impulsive, seemingly unmotivated, disorganized, and lacking a reasonable goal. Conversely, in case 1, we observed a partial impairment of both components. In case 1, the defendant cannot inhibit behavior but retains the capacity to program, organize, and finalize actions. The crime committed was organized, likely premeditated, and aimed at obtaining personal benefit. We found that reasoning about consequences was absent in both defendants, as was the ability to understand the act's criminality and moral standards. However, we noted that the defendant in case 2 was un-

able to correctly interpret the situation (crime context) and to reason about the possibility of not acting (alternative choice), as well as being incapable of appreciating whether the action committed was morally wrong (appreciation of the criminal behavior). In contrast, the defendant in case 1 understood all these aspects. Transparency in forensic psychiatric assessment is one of the most valuable aspects of using DIASS. This allows forensic experts to achieve greater replicability and standardization of results, thereby providing concrete support for evaluation, especially in the most complex cases, such as those involving defendants with intellectual disabilities.

These findings underscore the importance of comprehensive forensic assessments considering the cognitive and functional impairments associated with intellectual disabilities and their impact on criminal behavior, including challenges in social interactions and adaptive behaviors.

Conclusion

The presented cases underscore the complexities of forensic evaluations in individuals with mild IDD, revealing significant impairments in reasoning and understanding criminal behavior. The use of DIASS enhances the reliability and transparency of these evaluations, supporting the need for comprehensive and nuanced forensic assessments. Nonetheless, the forensic expert must conduct a comprehensive assessment of the individual's overall functioning and a dimensional evaluation of psychopathological aspects, following DSM diagnostic criteria. This approach is essential to accurately determine any potential causal relationship between ID and criminal behavior.

Data availability statement
The original contributions presented in the study are included in the article/supplementary material; further inquiries can be directed to the corresponding authors.

Ethics statement
There is no sensitive data in the two cases for which a psychiatric forensic assessment was carried out. The data has been completely anonymized and is not traceable to the individuals involved.

Conflict of interest
The authors declare that the research was conducted without any commercial or financial relationships that could potentially create a conflict of interest.

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Abbreviations
Intellectual developmental disorder (IDD)
Intellectual disability (ID)
Intelligence Quotient (IQ)
Autism spectrum disorder (ASD)
Attention-deficit hyperactivity disorder (ADHD)
Defendant Insanity Assessment Support Scale (DIASS)
Wechsler Adult Intelligence Scale - IV edition (WAIS-IV)
The semi-structured interview Vineland-II - Adaptive Behavior Scales - Second Edition (Vineland-II)
Autism Diagnostic Interview-Revised (ADI-R)

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Casistica

Death by work: consideration from forensic case study on the relationship between suicide and work-related distress

Morire di lavoro: spunti di riflessione da un caso peritale sui rapporti tra suicidio e distress lavoro-correlato

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Abstract

The purpose of this contribution is to provide some insights into the phenomenon of distress which, in particular work contexts and at certain historical-social junctures, provokes in some individuals not only a clinical disorder integral to a condition of so-called occupational, but also psychopathological pictures such as to motivate a real suicidal choice; that is, a frankly self-destructive option in which are always and in any case called into play all those factors that must be examined in medical-assessment where it is necessary to verify the existence or non-existence of a causal link between the psycho-physical conditions of the worker at the time of his death and the type of professional activity he carried out at these precise junctures. Given that such realities have increased especially during the period of national health emergency from COVID-19 pandemic in the years 2020-2022, an expert case is taken as a starting point and, with technical inputs from the so-called psychological autopsy, the problem of causation in such cases is examined.

Keywords: suicide, work-related distress, national health emergency by pandemic Covid-19, forensic evaluation, medical expertise, psychological autopsy

Riassunto

Scopo del presente contributo è fornire alcuni spunti di riflessione sul fenomeno del distress che, in particolari contesti lavorativi e in determinati frangenti storico-sociali, provoca in alcuni soggetti non solo un disturbo clinico integrante una condizione di malattia c.d. professionale, ma anche quadri psicopatologici tali da motivare una vera e propria scelta suicidaria; cioè un'opzione francamente autodistruttiva nella quale sono sempre e comunque chiamati in causa tutti quei fattori che devono essere esaminati in sede medico-valutativa laddove sia necessario verificare l'esistenza o meno di un nesso di causalità tra le condizioni psico-fisiche del lavoratore al momento del suo decesso e la tipologia di attività professionale da lui svolta in quei precisi frangenti. Atteso che tali realtà sono aumentate soprattutto durante il periodo di emergenza sanitaria nazionale da pandemia da COVID-19 negli anni 2020–2022, si prende spunto da un caso peritale e, con gli apporti tecnici della c.d. autopsia psicologica, si esamina il problema del nesso di causa in tali fattispecie.

Parole chiave: suicidio, distress lavoro-correlato, emergenza sanitaria nazionale da pandemia Covid-19, consulenza tecnica in sede civilistica, autopsia psicologica

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Death by work: consideration from forensic case study on the relationship between suicide and work-related distress

Premessa

Il presente contributo si prefigge di segnalare alcuni spunti di riflessione forniti da un caso peritale sui rapporti tra suicidio e distress lavoro-correlato nel peculiare momento storico dell'emergenza sanitaria nazionale da pandemia ex COVID-19. La complessità delle problematiche in oggetto (segnatamente: i rapporti tra contesto lavorativo e stress occupazionale; quelli tra distress e suicidio; quelli tra limitazioni delle libertà personali in casi di c.d. emergenza sanitaria nazionale e reattività psichica *rectius* vulnerabilità antropologica) implica necessariamente un debito approfondimento della fattispecie esaminata.

Il caso

Storia di vita

Trattasi di un soggetto in VI decade di vita, dirigente d'azienda, che, a motivo del distress vissuto in ambito lavorativo non solo durante il periodo della pandemia da COVID-19, ma anche nel corso di una contestuale riorganizzazione aziendale conseguente alla fusione con una multinazionale della ditta dove lavorava da oltre un ventennio, si suicidava dopo aver lasciato uno scritto nel quale accusava di "omicidio" i vertici della stessa ditta.

La ricostruzione della complessiva storia di vita è avvenuta ricorrendo al M.A.P.I. cioè al protocollo integrato di autopsia psicologica, come storicamente sviluppatosi (Shneidman & Farberow, 1961; Shneidman, 1981; Bonicatto, Garcia Pèrez & Rojas Lòpez, 2006; Barbieri & Ciappi, 2020). Dalla raccolta anamnestica familiare e personale, fisiologica e patologica, remota e prossima, si apprende quanto segue: familiarità esente da fattori di rischio e da antecedenti di rilievo psicopatologico; terzogenito di sei figli, con cui erano dichiarati rapporti sempre validi; sviluppo psico-fisico di tipo fisiologico; scolarità regolare fino al conseguimento della laurea in Economia e Commercio; adeguata integrazione psico-sociale; fidanzamento di cinque anni con successivo matrimonio durato fino alla morte; duplice procreazione; ménage familiare funzionale; episodio di meningite nel 2002, trattata con ricovero ospedaliero di quattro giorni e seguita da "restitutio ad integrum"; consumo di un pacchetto di sigarette al giorno, con progressiva riduzione negli ultimi anni nel tentativo di smettere di fumare; assenza di qualsivoglia problema nelle esperienze professionali antecedenti l'assunzione nella società dove lavorava sino al decesso.

Carriera professionale

L'excursus lavorativo è il seguente: assunzione in una ditta che gestiva il trasporto di persone negli Anni Novanta; nomina a dirigente all'inizio del II Millennio; significativo coinvolgimento personale nel contesto professionale con progressiva identificazione nell'azienda (cfr. verbale di conciliazione tra il soggetto e la ditta per ferie non godute a due anni dalla maturazione); necessità da parte sua di riorganizzare il servizio per un duplice ammanco di titoli di viaggio nel 2015 e nel 2019, fattispecie questa della quale egli era riconosciuto totalmente estraneo, ma dalla quale, in qualche misura, si sentiva pur sempre "moralmente" responsabile; negli ultimi due anni, progressivo sviluppo di "timori" e "malumori" per la ristrutturazione dell'azienda, successiva all'assorbimento della stessa da parte di una multinazionale; sviluppo di significativa "sofferenza psicologica" in conseguenza dell'ennesimo episodio di sparizione di titoli di viaggio a pochi mesi dal decesso, nonostante l'avvenuta sua promozione a "responsabile" del competente ufficio; passaggio all'atto autodistruttivo mediante auto-precipitazione da grande altezza dopo la stesura di un biglietto suicidario contenente precise accuse nei confronti dei nuovi proprietari. Si aggiunge altresì che, negli ultimi cinque anni, usufruiva soltanto di una settimana di vacanze, perché anche durante le ferie rispondeva alle comunicazioni regolarmente ricevute e, in alcune occasioni, si recava in ufficio (non a caso, nel verbale di conciliazione sottoscritto dal soggetto stesso e dalla società circa le vacanze non godute dal lavoratore entro due anni dalla maturazione, gli erano riconosciuti sia un cospicuo numero di ferie non più fruibili, sia una situazione di "super-lavoro").

Il suicidio

Premesso che la Vigilia di Natale il soggetto aveva fissato con alcuni colleghi di lavoro un appuntamento al quale non di presentava, lo stesso giorno egli usciva di casa senza telefono cellulare. Non riuscendo a mettersi in contatto con lui, la moglie avvisava l'ufficio di Polizia Locale ed il figlio, andato alla ricerca del padre, dopo averne rintracciato l'auto in un posteggio, ne scopriva il cadavere nel terreno sottostante una ventina di metri. I sanitari del 118, intervenuti successivamente, ne constatavano l'avvenuto decesso, in assenza di qualsiasi segno di lesività esterna sul corpo.

Messaggi suicidari

Nel portafoglio del soggetto, erano rinvenuti due messaggi, uno per ogni lato di un unico foglio, il contenuto

dei quali era rispettivamente: "*Auguro ai signori dell'azienda la mia stessa fine. Non meritano di vivere ! Fate causa di omicidio*"; "*Per voi cari chiedo solo perdono, ma credete così non riuscivo più a vivere ! Fatevi forza che senza di me si risolveranno tanti problemi*". A ciò si aggiunga che, nel computer della vittima, vi era una decina di email scambiate con i colleghi di lavoro nel corso dell'ultimo anno, il contenuto delle quali esemplificava una palese deflessione timica. Le comunicazioni di posta elettronica si interrompevano tre giorni prima del decesso.

Problemi posti dal caso

Rapporti tra contesto lavorativo e stress occupazionale

Il caso in esame comporta l'analisi dei rapporti tra contesto lavorativo e stress occupazionale, fenomeno questo che viene definito come "stress lavoro-correlato" ed è inteso nella sua accezione negativa, cioè come *di-stress*. Esso è stato considerato tra i problemi più importanti per la sicurezza in ambito professionale poiché, nel suo complesso, sta ad indicare quella esiziale esperienza emozionale (accompagnata da modificazioni biochimiche, comportamentali e cognitive) vissuta dal soggetto sul luogo di lavoro in conseguenza della difficoltà a rispondere a richieste esperite come eccessive rispetto alla risorse individuali (Baum, 1990).

Infatti, ogni stimolo, richiedendo all'individuo una risposta adattiva, può diventare una fonte di stress, cioè uno *stressor*, l'effetto disturbante del quale dipende dalla dal-l'analisi che ogni soggetto effettua della situaizone stessa e delle competenze che egli sente di possedere per affrontarla. Tale valutazione, a sua volta, determina lo *strain*, cioè l'impatto negativo che la situazione potenzialmente stressante ha sul singolo e che si esprime con disagio psicofisico.

Secondo Magnavita (1990) e Taylor (1999), le condizioni di insorgenza dello stress occupazionale sono dovute a: contesto ambientale di comparsa dell'elemento stressante; percezione e valutazione di tale elemento; vulnerabilità individuale allo stress; abilità personali per fronteggiare gli agenti stressogeni. Ulteriori fattori di rischio sono rappresentati da: carico e ritmo di lavoro, ruolo dell'organizzazione, progressione di carriera, rapporti interpersonali con colleghi e superiori, interfaccia casa-lavoro, eventuali cambiamenti nell'assetto aziendale. In tale ottica, il benessere personale, inteso come combinazioni di fattori individuali ed organizzativi, risulta fondamentale per determinare o meno un elevato livello di rendimento lavorativo (Donald, Taylor, Johnson, Cooper, Cartwright & Robertson, 2005); il che implica l'esigenza di porre attenzione all'assetto ed al funzionamento della personalità del lavoratore, la quale, per definizione, organizza e regola nel tempo i rapporti tra il soggetto e il suo ambiente di vita. In Svezia, del resto, è stato creato un particolare questionario sulle prestazioni lavorative individuali (IWPQ) (Dåderman, Kajonius, Hallberg, Skog & Hellström, 2023; Hjalmarsson & Dåderman, 2022), correlato ai tratti fondamentali di personalità e costruito in base al modello del cinque fattori (Big Five) (Ramos-Villagrasa, Fernández-del-Río & Castro, 2022): estroversione, nevroticismo, gradevolezza, coscienzialità e apertura. Il campione di riferimento era composto da 344 manager svedesi e quello di controllo era costituito dalla popolazione comune. Dalla comparazione tra i due gruppi sul tema del narcisismo grandioso, è emerso come la dimensione del narcisismo vulnerabile e quella del nevroticismo portassero a comportamenti controproducenti e ad una performance lavorativa inferiore (Dåderman & Kajonius Petri, 2024).

Nel caso in esame, le diverse vicende lavorative – dagli ammanchi economici alla ristrutturazione conseguente alla fusione con una multinazionale – unitamente alla marcata e disfunzionale identificazione tra organizzazione aziendale e ruolo dirigenziale del soggetto, nel contesto altresì di una situazione ambientale condizionata pregiudizialmente da un'emergenza sanitaria nazionale, hanno integrato una situazione tale di distress lavorativo da motivare quella che in Psicopatologia prende il nome di "reazione abnorme agli eventi", sulla quale la letteratura ha fornito contributi magistrali: da quelli di Jaspers (1913) (il quale descrive quadri psicopatologici secondari, cioè "reattivi", ad avvenimenti di vita e distingue le *reazioni comprensibili* – basate sul rapporto tra motivazione e reazione – da quelle *incomprensibili* – nelle quali tale relazione non si dimostra –, con tutti gli esiti del caso), a quelli di Schneider (1958) (quando teorizza il concetto di "reazione abnorme" agli eventi – *Erlebnisreaktionen* - quale risposta emotivo-affettiva congrua e motivata ad un avvenimento e sempre connessa al "fondo" – *Untergrund* – cioè all' "endogeno" della reazione stessa, per cui risultano "anomale" quelle che si allontanano dalla media, per la loro insolita intensità, per l'inadeguatezza rispetto al motivo, o per la loro durata temporale); da quelli di Kretschmer (1950) (per il quale esistono degli "avvenimenti chiave", rappresentati da quelle reazioni innescate da eventi di vita, per cui, "affilato come un rasoio", l'accadimento va a incidere proprio sul punto più debole dell'individuo), a quelli di Binswanger (1931) (per il quale nella "re-actio" è sempre contenuta anche l'"actio", poiché è sempre l'*Erlebnis* – cioè l'esperienza vissuta – a fornire la cifra e la misura non solo del *Dasein* – cioè il modo di essere di chi vive quell'esperienza –, ma anche dell'*Ereignis* – vale a dire l'evento posto in essere dall'agito –).

I rapporti tra distress lavorativo e suicidio

Proprio la tipologia di reazione all'evento consente di chiarire le connessioni tra esperienza lavorativa e suicidio. Tale problema è stato particolarmente studiato in Giappone, dove è stato evidenziato (Swart, Mann, Brown, & Price, 2010) una correlazione tra graduale tra il notevole distress professionale e l'ideazione suicidaria. In questa nazione, infatti, l'approccio al lavoro è connotato da una dedizione pressoché completa e anche i rapporti interpersonali sono incentivati dall'azienda stessa, in virtù del fatto che l'armonia tra dipendenti e datori di lavoro

costituisce un elemento imprescindibile della stessa attività professionale (Yamauchi et al., 2017).

Questi fenomeni nella cultura nipponica sono stati descritti con differenti termini: negli Anni Sessanta, durante il periodo di espansione economica, si è parlato di *workaholic* o sindrome da dipendenza lavorativa; negli Anni Settanta, quando situazioni lavorative fortemente stressogene hanno iniziato a provocare un notevole numero di decessi tra i lavoratori, sono stati utilizzati termini come *karōshi* e *karōjisatsu*. Mentre con il primo si indicavano quelle situazioni nelle quali lo stress era dovuto ad un eccessivo carico di lavoro, con il secondo invece si faceva riferimento a quei casi in cui, oltre al distress da sovraccarico professionale, interveniva anche una criticità psicologica individuale ad indurre il lavoratore al suicidio (Hosokawa, 1981; Inoue & Matsumoto, 2000; Iwasaki, Takahashi & Nakata, 2006; Amasaga, Nakayama & Takashi, 2005).

In Giappone, secondo i dati della piattaforma statistica (https:// www.-statista.com/ statistics/ - 622325 /japan-work-related-suicides/, in 9 anni. (tra il 2014 e il 2023) vi è stato un incremento del 27,77% dei suicidi legati a problemi sul lavoro; infatti, si è passati dai 2.323 casi annui del 2014 ai 2.968 del 2022. Tale situazione riconosce, sul piano storico, due precedenti giurisprudenziali molto importanti.

Il caso, per così dire, spartiacque per il riconoscimento del danno per decesso da *karōshi* riguardava un ingegnere trentenne, impiegato di una casa automobilistica, deceduto durante un turno di lavoro straordinario notturno. La moglie, prescindendo dall'obbligo di fedeltà all'azienda, chiese il risarcimento del danno per la morte del coniuge e la vicenda giudiziaria si concluse nel 2007, con il riconoscimento della responsabilità civile dell'azienda per il decesso da super-lavoro del lavoratore (il quale, nel mese antecedente il decesso, oltre al turno ordinario di 12 ore quotidiane, aveva lavorato per ben 106 ore straordinarie) (Weathers & North, 2009).

L'altro caso, inerente il *karōjisatsu*, vedeva come protagonista un soggetto che, assunto subito dopo la laurea in una società deputata alla promozione di stazioni radiofoniche, dopo un periodo di tempo con turni giornalieri di dieci ore, iniziava a fare turni straordinari registrati e conteggiati in misura inferiore a quella reale; al punto che, all'età di 24 anni, a meno di un anno dall'assunzione, si impiccava nel bagno della sua abitazione (https://www.courts.go.jp/app/hanrei_en/detail?id=1243).

In Italia, il problema dello stress lavorativo è stato regolamentato dal Decreto Legislativo n. 81 del 2008, che sostituisce il Decreto Legislativo n. 296 del 1996. Il Testo Unico del 2008 impone al datore di lavoro, tra gli altri, anche l'obbligo di valutare i rischi da stress lavoro-correlato, obbligo entrato in vigore dal 1° gennaio 2011 grazie ad una modifica dell'articolo 28 con il Decreto Legislativo n. 106 del 2009.

Sul punto, si richiama il percorso metodologico per la valutazione del rischio di stress lavoro-correlato previsto dall'INAIL sulla base del *benchmarking*, cioè del principale modello europeo. Il percorso consta di quattro fasi e ognuna risulta fondamentale per giungere ad una corretta identificazione del rischio di stress lavoro-correlato, come indicato dallo schema (cfr. figura 1) e dalla tabella (cfr. tab. 1) riportati di seguito:

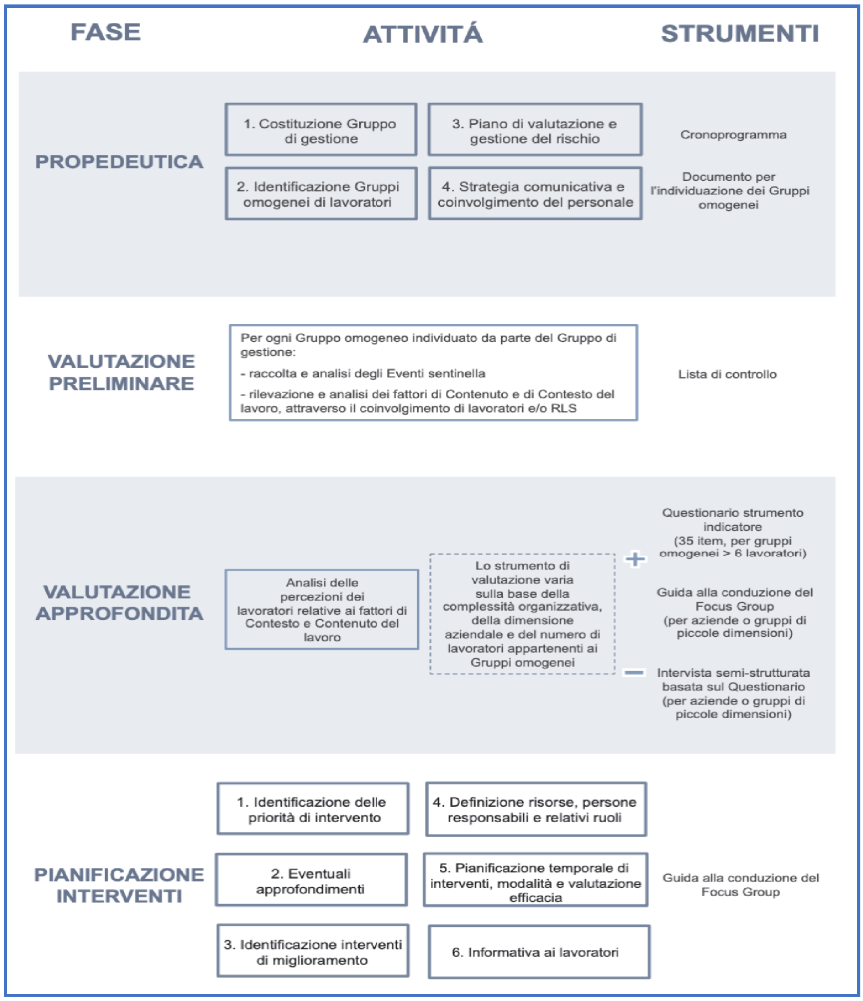

Fig. 1 - Schema inerente fasi, attività e strumenti per prevenire lo stress aziendale (Fonte: Manuale ad uso delle aziende in attuazione del D.lgs 81/2008 e s.m.i. La metodologia per la valutazione del rischio stress-lavoro correlato, INAIL, 2017, p.18) https://www.inail.it/cs/internet/-docs/alg-pubbl-la-metodologia-per-la-valutazione-e-gestione_6443112509962.pdf

INDICATORI AZIENDALI	CONTESTO DEL LAVORO	CONTENUTO DEL LAVORO
1. Indici informatici	1. Funzione e cultura organizzativa	1. Ambiente e attrezzature di lavoro
2. Assenteismo	2. Ruolo nell'ambito dell'organizzazione	2. Pianificazione dei compiti
3. Assenze per malattia	3. Evoluzione della carriera	3. Carico / ritmo di lavoro
4. Ferie non godute	4. Autonomia decisionale - controllo del lavoro	4. Orario di lavoro
5. Rotazione del personale	5. Rapporti interpersonali sul lavoro	
6. Cessazione del rapporto di lavoro / turnover	6. Interfaccia casa-lavoro / conciliazione vita-lavoro	
7. Provvedimenti / sanzioni disciplinari		
8. Richieste visite mediche straordinarie		
9. Segnalazione stress lavoro		
10. Istanze giudiziarie		

Tabella 1 - Aree indicate nella checklist per la valutazione preliminare di valutazione preliinare di stress lavoro-correlato (Berto, 2020, p. 219)

Nel caso concreto, nessuna di tale attività è stata posta in essere dall'azienda sia nel periodo di fusione/riorganizzazione, sia in quello di pandemia, non solo concomitanti, ma sempre e comunque interagenti nell'ottica della tutela dell'integrità psicofisica del lavoratore. Infatti, pur dando atto che nel periodo di tempo tra il 2020 ed il 2021 era stata concessa ai dipendenti la possibilità di usufruire del tele-lavoro, il soggetto esaminato era l'unico a recarsi ogni giorno a lavorare in ditta, salvo poi lamentare quella situazione "abbandonica" e "depressogena" esemplificata, come si diceva, in diverse email. In merito, sia qui sufficiente richiamare la natura quantomeno «ossimorica», se non «ambigua», dal punto di vista della salute mentale, di un provvedimento coattivo come il c.d. lockdown nazionale. Infatti, se da un lato esso pone il problema del diritto alla tutela della salute, dall'altro però non può mai prescindere da tematiche concernenti non solo il diritto all'auto-determinazione, ma anche la prevenzione dei conflitti in contesti di per sé disfunzionali, laddove la restrizione del regime di libertà individuale può verosimilmente diventare un catalizzatore di agiti aggressivi (Mercuri, Chen, Di Maggio & Barbieri, 2021).

Conclusioni

Nel caso concreto, la valutazione tecnica basata sull'utilizzo del Modello Integrato di Autopsia Psicologica (M.A.P.I.) ha permesso di esaminare sia i prodromi, sia i dinamismi che, con ogni verosimiglianza, hanno motivato l'agito autodistruttivo, con precipuo riferimento al contesto relazionale-lavorativo con il quale la vittima si era abnormemente identificata, in un periodo storico-temporale non solo conflittuale a livello sociale, ma anche obiettivamente disfunzionale sul piano professionale. In tal modo, si sono forniti ad un tribunale civile dello stato italiano tutti quegli elementi tecnici per una più compiuta e più puntuale applicazione delle norme sulla tutela dell'integrità psico-fisica del lavoratore, con precipuo riferimento ai rapporti tra distress lavoro-correlato e suicidio, come da letteratura (Barbieri, Barbero & Paliero, 2013; Merzagora, Travaini, Barbieri, Caruso & Ciappi, 2017; Barbieri, Ciappi, Caruso, Travaini & Merzagora, 2018; Barbieri, Travaini, Caruso, Ciappi & Merzagora, 2019; Barbieri, Grattagliano, Rossetto & Merzagora, 2023). L'auspicio è quello che una tipologia siffatta di consulenza tecnica, come quelle già utilizzate in ambito giuslavoristico (Barbieri, 2003; Barbieri & Luzzago, 2005), possa trovare un utilizzo sempre maggiore nell'amministrazione della Giustizia.

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