Inferences from Criminal Cases of Individuals Diagnosed with Schizophrenia: A Retrospective Document Analysis

Şizofreni Tanılı Bireylerin Ceza Davalarından Çıkarımlar: Retrospektif Bir Döküman Analizi

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Objective: This study aims to examine the criminal characteristics of individuals diagnosed with schizophrenia involved in criminal behavior.

Method: This study employed retrospective document analysis as a qualitative research method. Data were obtained from the website of the Court of Cassation of the Republic of Turkey. In July 2022, searches were conducted using the keyword "schizophrenia". All published criminal case files directly related to individuals diagnosed with schizophrenia and reviewed by the criminal divisions of the Court of Cassation were examined. A total of 426 case files were analyzed (N = 426).

Results: Criminal cases from 2010-2021 were categorized by offender's age, legal interest, crime type, violence of crime, and victim. Most cases involved adults. About 25% of individuals diagnosed with schizophrenia committed "crimes against property" and "crimes against liberty," with "theft, intentional injury, and threats" being the most common offenses. The crimes were generally moderately violent, and the victims were often individuals unknown to the offender.

Conclusion: This study sheds light on the role of individuals diagnosed with schizophrenia who are involved in crime within the criminal justice system. In this context, it is recommended that mental health professionals be involved in all judicial processes to assess the mental state, conduct risk assessments, determine appropriate treatment approaches, and better understand the key characteristics related to criminal behavior in individuals with schizophrenia. Additionally, tailoring rehabilitation programs according to the type of crime and training people working in the legal field in mental health can significantly improve the care and management of these individuals.

Keywords: Crime, criminal behaviour, schizophrenia

Amaç: Bu çalışmanın amacı suça karışmış şizofreni tanısı almış bireylerin suç özelliklerini incelemektir. Yöntem: Bu çalışmada nitel araştırma yöntemi olarak retrospektif doküman analizi kullanılmıştır. Veriler Türkiye Cumhuriyeti Yargıtay'ının web sitesinden elde edilmiştir. Temmuz 2022 tarihinde "şizofreni" anahtar kelimesi kullanılarak taramalar yapılmıştır. Şizofreni tanısı almış bireylerle doğrudan ilişkili olup Yargıtay ceza daireleri tarafından incelenen ve yayımlanmış tüm ceza dava dosyaları incelenmiştir. Toplam 426 dava dosyası analiz edilmiştir (N = 426).

Bulgular: 2010-2021 yılları arasındaki ceza davaları failin yaşı, hukuki değer, suç tipi, şiddet düzeyi ve mağdura göre kategorize edilmiştir. Vakaların çoğu yetişkinleri içermektedir. Şizofreni tanısı almış bireylerin yaklaşık %25'i malvarlığına ve hürriyete karşı suçlar işlemiş olup, en yaygın suç tipleri hırsızlık, kasten yaralama ve tehdit olmuştur. Suçlar genellikle orta şiddettedir ve mağdurlar çoğunlukla failin tanımadığı kişilerdir.

Sonuç: Bu çalışma, suça karışan şizofreni tanısı almış bireylerin ceza adalet sistemi içindeki rolüne ışık tutmaktadır. Bu bağlamda, ruhsal sağlığı profesyonellerinin; ruhsal durumu değerlendirmek, risk değerlendirmesi yapmak, uygun tedavi yaklaşımlarını belirlemek ve şizofreni tanılı bireylerde suç davranışıyla ilgili temel özellikleri daha iyi anlamak için yargılama sürecin tamamına dahil edilmeleri önerilmektedir. Ek olarak rehabilitasyon programlarını suç tipine göre uyarlamak ve hukuk alanında çalışan kişileri ruh sağlığı konusunda bilgilendirmek bu bireylerin bakımını ve yönetimini önemli ölçüde iyileştirebilir. **Anahtar sözcükler:** Suç, suç davranışı, şizofreni

Introduction

ABSTRACT

ÖZ

Although individuals diagnosed with schizophrenia (idwSCH) typically exhibit lower overall crime rates compared to the general population (Silverstein et al. 2015, Kim 2019), research consistently indicates an elevated risk of violent behavior among this group (Fazel et al. 2009, Fazel et al. 2018, Whiting et al. 2022). Nevertheless, studies exploring this risk reveal inconsistencies, with considerable uncertainty surrounding the factors contributing to this heterogeneity (Fazel et al. 2009, Hodgins and Klein 2017).

The association between schizophrenia and criminal behavior can profoundly impair the quality of life for affected individuals, restrict access to essential health and social services (Heinrichs and Sam 2012), disrupt care

continuity, elevate morbidity and mortality rates, and exacerbate stigmatization (Whiting et al. 2022). Furthermore, this condition may precipitate crises within families and the wider community (İnan et al. 2018).

Mental health professionals play a pivotal role in addressing these challenges by identifying and managing highrisk behaviors, implementing therapeutic interventions (Hörberg 2018), and informing the development of evidence-based social policies (Hörberg and Dahlberg 2015, Hammarström et al. 2020). However, the forensic evaluation of idwSCH remains a complex and contentious process. Current guidelines to support healthcare professionals in this domain are limited in scope and depth (Lamberti et al. 2007, Whiting et al. 2021). Although existing frameworks incorporate violence within comprehensive risk assessments, inconsistencies and gaps in risk management practices persist (Whiting et al. 2021). Additionally, concerns have been raised that highlighting the association between mental illness and violence may intensify stigmatization (Lok and Dijk 2019). Conversely, a nuanced and evidence-based presentation of the complex relationship between mental illness and violent crime may mitigate stigma (Whiting et al. 2021).

Forensic psychiatric practice must adhere to the highest standards of scientific evidence. However, the evidence base in forensic psychiatry remains inadequate, underscoring the urgent need for high-quality, comprehensive research on this doubly stigmatized population, who face marginalization due to both psychiatric illness and criminal behavior (Völlm et al. 2018). Consequently, further investigation into the relationship between schizophrenia and criminal behavior is imperative. The limited body of research on this topic (Heinrichs and Sam 2012, Hodgins and Klein 2017, Fazel et al. 2018, Whiting et al. 2021, Whiting et al. 2022) highlights the need to focus specifically on the characteristics of crimes committed by idwSCH (Hodgins and Klein 2017). In this context, the present study aims to investigate the crime characteristics of individuals diagnosed with schizophrenia.

Methods

This study used the qualitative research method of retrospective document analysis "(Bowen 2009).

Sample

The criminal files published on the official website of the Court of Cassation of the Republic of Türkiye of idwSCH were examined (N = 426). The Court of Cassation is one of the highest courts established by the Constitution of the Turkish Republic. It serves as the final authority for reviewing the rulings and judgments rendered by justice courts.

No specific timeframe was set for screening the said files. All relevant cases heard by the court were reviewed. The inclusion criteria were as follows: (i) the cases directly related to idwSCH, and (ii) the cases examined by the criminal divisions of the Court of Cassation. The exclusion criteria were as follows: (i) the cases reviewed by civil divisions, (ii) criminal cases in which the individual with schizophrenia is the victim, (iii) the presence of a comorbid condition, (iv) the diagnosis of schizophrenia not being certain yet, (iv) behavior that does not constitute a crime, (v) cases not directly related to idwSCH, (vi) absence of a schizophrenia diagnosis, and (vii) insufficient data.

Procedure

Ethics committee approval was not obtained because this study did not have a direct impact on humans and/or animals and used secondary data with open access. However, during the study, the Personal Data Protection Law (2016) and the Internet Research Ethics Guide (Franzke et al. 2021) were considered in the analysis and reporting. The research data was reviewed in July 2022 and obtained via the official website of the Court of Cassation of the Republic of Türkiye. The Turkish keyword "şizofreni" was used during the data scanning. The total number of criminal cases was 676, of which 250 were excluded (idwSCH is the victim in n=91, diagnosis not yet certain in n=69, data insufficient in n=58, absence of a schizophrenia diagnosis in n=17, cases not directly related to idwSCH in n=11, no crime occurred in n=2, and duplicate cases in n=2). Accordingly, 426 (N=426) of the cases were included in the research. Although the files clearly indicate the presence of idwSCH, there is no information on who made the diagnosis or which method was used.

Data Analysis

The document analysis method proposed by Bowen (2009) consists of three stages: (i) skimming (superficial examination), (ii) reading (thorough examination), and (iii) interpretation. This method is used to identify

meaningful and significant passages in documents, categorize the data, and generate themes (Bowen 2009). Document analysis was categorized by the offender's age, legal interest affected, type of crime, level of violence, and victim of the crime.

Table 1. Criminal characteristics of individuls with schizophrenia (N=426)		
	Variables	n(%)
Age	Adult	414 (97)
0	Juvenile	12 (3)
Legal	Crimes against property	116 (27)
interest	Crimes against liberty	98 (23)
	Crimes against physical integrity	71 (17)
	Crimes against dignity	58 (14)
	Crimes against life	45 (11)
	Crimes against public health	20 (5)
	Crimes against sexual integrity	17 (4)
	Crimes against the reliability and functioning of the public administration	13 (3)
	Crimes against judicial bodies of court	12 (3)
	Crimes against public confidence	8 (2)
	Other crimes in the Turkish criminal code	7 (2)
	Violation of special legislations +	36 (8)
Crime	Crimes against property	
type	Theft	79 (19)
		23 (5)
	Damage to property Fraud	14 (3)
	Robbery	9 (2)
	Crimes against liberty	9(2)
	Threat	CE (1E)
		65 (15)
	Violation of inviolability of domicile Disturbing the peace and tranquility of individuals	19 (4) 11 (3)
	Deprivation of liberty	8 (2)
	Crimes against physical integrity	70 (17)
	Intentional injury	72 (17)
	Crimes against dignity	55 (10)
	Insult	57 (13)
	Crimes against life	00 (0)
	Intentional killing*	32 (8)
	Attempted killing	15 (4)
	Crimes against public health	
	Possession of narcotics and psychotropic substances	11 (3)
	Trafficking in narcotic and psychotropic substances	9 (2)
	Crimes against sexual integrity	
	Child sexual abuse	10 (2)
	Sexual assault/harassment	8 (2)
	Crimes against the reliability and functioning of the public administration	
	Obstruction of a public officer	13 (3)
	Crimes against the judiciary	
	False accusation	12 (3)
	Crimes against public confidence	
	Counterfeiting official and private documents	7 (2)
	Other crimes in the Turkish criminal code	7 (2)
	Offenses under special laws+	34 (8)
Crime	Minimal violence	151 (35)
violence	Moderate violence	217 (51)
	Serious violence	58 (14)
/ictim of	Relative	29 (7)
he Crime	Stranger	217 (51)
	Unknown	182 (43)

^{*}The crime of negligent killing was included in only one file. That file is attached to the number of intentional kill files. +Anti-Smuggling Code, Tax Procedure Code, Code on Regulation of Tobacco, Tobacco Products and Alcohol Market, Code on Firearms and Knives and Other Tools, Code on Protection of Cultural and Natural Properties Code on Intellectual and Artistic Works Age: There was no age information of idwSCH in the cases examined. Therefore, age was categorized into two groups: adults and juveniles. Legal interest: Legal interest means significantly vital values that are fundamental for the continuation of social life and thus put under protection by legal order (Daci 2010, Krešić 2020, Koca et al. 2024). The criminal cases in this study are analyzed and classified according to the legal interests violated by idwSCH. These cases are categorized into the following: crimes against life, physical integrity, sexual integrity, liberty, dignity, property, public confidence, public morals, and violation of special legislation. (Table 1).

Type of crime: Crime refers to a punishable act that is disapproved by society and regulated by law (Demirbaş 2021). Each type of crime violates a specific legal interest that is protected by the law. In other words, committing a crime means infringing upon the legal interest that the law aims to protect. For instance, sexual assault and sexual harassment are violations of sexual integrity. In this respect, every crime type in the Turkish Criminal Code and other special legislations are listed separately. In some cases, it has been seen that idwSCH have committed more than one type of crime (Table 1)

Level of violence: To categorize the crimes' violence level, the scale created by Taylor is used (Taylor 1985) (Table 2). The scale rates the crimes from 0 to 4 (0=completely non-violent, 4=serious violence). In this research, moderate violence and moderately serious violence are combined under the name of "moderate violence." In cases involving multiple offenses, classification was based on the crime with the highest level of violence. Victim of crime: The victims in the analyzed cases were categorized into three groups: relatives (including both family members and social acquaintances), strangers, and unknown individuals. In some cases, crimes were committed against both relatives and strangers simultaneously.

Table 2. Violence profile for the current offense		
0. Completely non-violent		
1. Minimal violence		
Verbally aggressive		
Carrying a weapon that was not used		
Minimal damage to property when this was accidental		
2. Moderate violence		
Violent act that causes minor bodily harm		
A sexual offense under force		
Using an offensive weapon but without causing injury		
Damage to property when this was the main intent		
3. Moderately serious violence		
Grievous bodily harm		
Damage to property when this was extensive and could have threatened life		
4. Serious violence		
The victim(s) died		
Life actually endangered, and victim hospitalized for more than 24 hours		

Statistical analysis

Descriptive statistical methods were used to analyze the data in this study. In qualitative data analysis, frequency distributions and percentages were calculated to reveal the characteristics of the data set. The results obtained in the study, the characteristics of the participants and the distribution of the main variables such as legal value, type of crime, severity and victim are summarized in Tables.

Results

The criminal files shared by the Court of Cassation are between the years 2010-2021. 97% of the individuals in the examined cases were adults. In terms of legal interest, it was found that 27% of the crimes are against property, 23% of the crimes are against liberty, and 17% of the crimes are against physical integrity. Additionally, 11% of the idwSCH were tried for crimes against life and 4% for crimes against sexual integrity. The research also categorized the crimes by their type, and idwSCH mostly committed theft (19%), intentional injury (17%), threat (15%), and insult (13%), respectively. 12% were tried for intentional killing and attempted killing, and 4% of them for sexual assault and sexual harassment. More than half of the crimes (51%) in the analyzed cases were of moderate violence. Only 7% of the crimes were committed against a relative (Table 1).

Discussion

Concerns persist that elucidating the association between mental illness and violence may exacerbate stigma

(Lok and Dijk 2019). However, presenting the intricate relationship between mental illness and violent crime in an accurate and reasoned manner may contribute to stigma reduction (Whiting et al. 2021). Forensic psychiatric practices must adhere to rigorous standards grounded in the most current scientific evidence. Nevertheless, the evidence base in forensic psychiatry remains limited, underscoring an urgent need for high-quality research involving this complex and doubly stigmatized population (Völlm et al. 2018). This issue demands attention from mental health professionals, practitioners, and policymakers. In this context, the present study analyzed Court of Cassation case files to evaluate the criminal characteristics of individuals diagnosed with schizophrenia (idwSCH). The findings indicate that nearly all cases involved adults. Approximately one in four idwSCH committed crimes against property or liberty, while about one in five engaged in offenses such as theft, intentional injury, or threats. These crimes typically involved moderate levels of violence, with victims predominantly being strangers.

This study confirms that nearly all crime files involved adults. This observation may be attributed to the typical onset of schizophrenia in late adolescence or early adulthood, with peak incidence between ages 18 and 25 (McGrath et al. 2008). A Swedish study identified a strong correlation between early risk factors—such as poor school conduct, police contact, crowded living conditions, and alcohol use—and the likelihood of later criminal behavior (Manninen et al. 2010). These findings suggest that early risk factors may influence both the progression of schizophrenia and the propensity for criminal behavior, highlighting the need for mental health professionals to closely monitor individuals, particularly in early adulthood. Early identification of risk factors and implementation of targeted interventions can aid in preventing criminal behavior.

Legal interests safeguarded by criminal law are fundamental to maintaining and promoting social order (Daci 2010, Krešić 2020, Koca et al. 2024). As these interests reflect a society's core values, understanding them is crucial for elucidating how criminal behavior undermines these principles. Thus, classifying crimes by legal interests is essential for upholding justice and ensuring public safety. Notably, no prior studies have specifically examined the legal interests affected by crimes committed by idwSCH. In this study, crimes were categorized by their associated legal interests, with crimes against property being the most prevalent, followed by those against liberty, physical integrity, dignity, and life. These findings offer insights into the severity of crimes committed by idwSCH. Understanding these crime patterns can assist mental health professionals in managing violence risks and implementing effective preventive measures (Ural et al. 2013). Moreover, such insights can inform the development of evidence-based care strategies and policy decisions (Heinrichs and Sam 2012).

The study found that theft was the most common crime committed by idwSCH, followed by intentional injury and threats. Similarly, İnan et al. (2018) identified intentional injury and threats as the most frequent offenses in this population. Another study reported elevated theft rates among idwSCH compared to the general population in the context of violent crimes (Kim 2019). To mitigate aggression in this group, the use of antipsychotic medications, particularly clozapine, has been recommended (Vasic et al. 2018, Howner et al. 2020). Due to methodological limitations, the efficacy of non-pharmacological interventions in reducing violence risk in forensic psychiatric settings remains uncertain, necessitating studies with more robust designs (Slamanig et al. 2021).

The association between schizophrenia and intentional killing is a critical issue with significant implications for mental health policy, clinical practice, and societal perceptions (Sonnweber et al. 2024). Such crimes often evoke fear and panic within communities (Nielssen et al. 2011). Research indicates that idwSCH face a significantly higher risk of committing violent offenses compared to the general population, with some studies suggesting rates five (Kim 2019) to twenty times higher (Anwar et al. 2011, Vinokur et al. 2014). Notably, İnan et al. (2018) reported that individuals with schizophrenia accounted for 10.6% of intentional homicides and 8% of attempted homicides. This study found that 12% of idwSCH in the sample were prosecuted for intentional or attempted homicide. These findings underscore the need to understand the circumstances, motivations, and conditions underlying criminal behavior in this population, which is vital for both individual treatment and public safety (Sonnweber et al. 2024). A detailed investigation of these behavioral patterns is essential for developing effective prevention strategies. When detention is necessary due to criminal acts, the European Psychiatric Association's forensic psychiatry guidelines emphasize that detention must not restrict access to mental health care. Comprehensive, multidisciplinary psychiatric care—including pharmacological and psychological treatments, structured daily programs, substance use interventions, and, when necessary, inpatient services—is critical for effective rehabilitation and the prevention of violent crimes in society (Völlm et al. 2018).

The relationship between schizophrenia and crimes against sexual integrity remains poorly understood (Drake and Pathe 2004, Lam et al. 2023). Although the overall rate of sexual offenses by idwSCH is relatively low, some studies suggest that male individuals with schizophrenia may be more likely to commit such crimes (Drake and

Pathe 2004). However, the frequency of sexual offenses among idwSCH is reportedly lower than in the general population (Alish et al. 2007). While this study does not specify offender gender, it found that 4% of crimes in the sample were against sexual integrity. A deeper understanding of the motivations behind such crimes could enhance intervention strategies and risk management efforts. The European Psychiatric Association's Forensic Psychiatry Guideline notes limited evidence for interventions targeting sexual offenders with serious mental disorders, indicating that no psychosocial interventions can currently be recommended. Further research is urgently needed to identify effective psychological and psychosocial treatments for this population (Völlm et al. 2018).

This study assessed the level of violence in crimes committed by idwSCH, finding that 51% involved moderate violence. This aligns with İnan et al. (2018), who reported that 83.3% of individuals with mental disorders exhibited psychotic features and committed serious crimes. Similarly, Uygur et al. (1992) found that 58% of idwSCH committed serious violent offenses, while 32% were involved in moderately violent crimes. Additionally, Kim (2019) noted that idwSCH were more likely to commit serious crimes compared to the general population. These findings highlight the critical need for continuous, effective care for idwSCH at both institutional and societal levels. Monitoring at-risk individuals, identifying early warning signs, and implementing preventive measures are essential to reducing criminal behavior and victimization. Beyond security measures, comprehensive care—including medical interventions, psychological therapies, social activities, and multidisciplinary collaboration—can significantly improve treatment outcomes and reduce recidivism (Gough et al. 2007, Völlm et al. 2018).

Research indicates that individuals with mental health issues rarely target strangers (Nielssen et al. 2011). Studies typically show that crimes are committed against family members or acquaintances (Belli et al. 2010, He et al. 2022). However, this study found that over half of the victims were strangers, possibly due to unknown victim identities in many cases. Although community treatment is not recommended for offenders with mental disorders (Völlm et al. 2018), public education on schizophrenia and crisis management is essential and should be delivered in a non-stigmatizing manner. Family-based interventions and educational materials teaching rapid calming techniques for idwSCH are also recommended (Gough et al. 2007). To effectively reduce crime risk, therapeutic environments should incorporate structured, evidence-based elements, including multidisciplinary collaboration, patient involvement, and safety-oriented practices. Group and individual therapies focusing on problem-solving and interpersonal skills are effective for individuals with serious mental disorders (Völlm et al. 2018).

This study has notable strengths and limitations. A key strength is the use of document analysis, which minimizes "participant reactivity" by avoiding direct researcher-participant interaction, thus enabling a more objective assessment of the relationship between idwSCH and crime. Additionally, to the researchers' knowledge, this is the first study to examine the intersection of schizophrenia and legal values. However, several limitations must be acknowledged. First, potential bias, including social desirability bias, may have influenced the results despite precautions. Second, accessibility constraints in Türkiye, where the Court of Cassation provides access only to precedent case files, prevented a direct comparison of crime rates between idwSCH and the general population. Variations in healthcare and justice systems across countries may also affect crime rates, emphasizing the need for reporting findings from diverse international contexts. Third, the study's qualitative design does not explore causal relationships. Future research could adopt prospective designs and investigate factors such as substance use at the time of the crime, treatment status, and treatment type (e.g., antipsychotics, antidepressants). Finally, the absence of data on delusions or paranoja in the examined cases limits insights into the motivations behind criminal acts, which are critical for understanding the relationship between schizophrenia and criminal behavior and for preventing stigmatization. The reliance on the keyword "schizophrenia" for data collection is another limitation; future studies could employ additional keywords to broaden data scope and diversity.

Conclusion

This study found that crimes against property, particularly theft, were the most prevalent among idwSCH, with offenses typically involving moderate violence and strangers as victims. Mental health professionals should be actively engaged in all stages of judicial processes, including mental state evaluations, risk assessments, treatment planning, and analysis of crime-related characteristics. Tailoring rehabilitation programs to offense types and enhancing mental health training for judicial personnel can significantly improve care quality for idwSCH. Furthermore, integrating social skills training, psychoeducation, multidisciplinary collaboration, and public awareness initiatives can reduce recidivism, enhance treatment outcomes, and foster a safer, less

stigmatizing environment. These strategies support individual recovery and provide a robust foundation for mental health professionals and judicial authorities to develop effective action plans.

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