

# The psychiatric correlation of terrorism – schizophrenia and the lone-actor terrorist

Mária Zsóka Bellavics 

Department of Criminal Psychology, Faculty of Law Enforcement, University of Public Service, Budapest, Hungary

E-mail: zsoka.bellavics@gmail.com

## Summary

The correlation between terrorism and mental disorder has been studied for decades. Empirical findings suggest that no major role of psychiatric disorders can be found in relation to terror attacks, except for one type of terrorism: the lonely offender. Schizophrenia has been proved to be one of the most important psychiatric disorders that have correlation with lonely-offender type terrorism. In this paper the symptomatology of schizophrenia is presented with a special regard to its role in the development of deviant tendency that may lead to terror attacks. A domestic case of lonely-offender terror activity is introduced with the aim of highlighting this correlation in practice. Based on international empirical data and cases such as the one presented here a conclusion can be drawn; close attention is required on the mental state in the case of lonely-offender terrorism.

**Keywords:** psychiatry, criminal, terrorism, schizophrenia, lonely-offender

## A terrorcselekmények pszichiátriai korrelációi a skizofrénia és a magányos elkövető tükrében

*Pszichiátria és terrorizmus*

Bellavics Mária Zsóka

Nemzeti Közszolgálati Egyetem, Rendészettudományi Kar, Kriminálpszichológia Tanszék, Budapest, Magyarország

## Absztrakt

A bűnelkövetés természetének vizsgálata során a mentális állapot kérdése egy rendszeresen előforduló problémakör. A pszichológia tudomány mellett, melynek különböző alkalmazott és elméleti területei régóta eszközül szolgálnak a bűnnel való küzdelem során, a pszichiátria is egyre nagyobb hangsúlyt kap. A 21. században a terrorizmus a bűnelkövetés egy igen speciális jelentőséggel bíró típusa. Mivel a terrorizmus társadalmi jelentőség szempontjából központi szerepet kapott az elmúlt évtizedekben, a tudományos világ is intenzív figyelmet szentel neki. A modern trendeknek megfelelően a terrorcselekmények természetének tanulmányozása során is egyre jobban előnyt élvez a minél szélesebb körű tudományos megközelítések integrálása, a multidiszciplináris megközelítés. A terrorizmus jelenségének vizsgálata során a pszichiátria diszciplínája is egyre gyakrabban szerephez jut, ennek megfelelően a terrorizmus és a mentális betegségek kapcsolata a kutatókat évtizedek óta foglalkoztatja. Ugyan az eddig gyűjtött empirikus adatok azt sugallják, hogy a mentális betegségeknek nincs kifejezett jelentősége a terrorcselekmények kapcsán, a terroristák egy speciális típusa, a magányos elkövetők által végrehajtott támadások ebből a szempontból kivételt képeznek. Több pszichiátriai zavar esetében találtak a normálpopulációhoz mérten magas prevalenciákat a magányos terroristák között. Ezek közül a skizofrénia az egyik legnagyobb jelentőséggel bíró pszichiátriai kórkép. Ez, tekintve, hogy a tudathasadásos elmebaj gyakran asszociálódik erőszakos cselekményekkel, nem meglepő, jóllehet a skizofrénia által mutatott deviancia igen eltérő a skizofrén populáción belül. Ez elsősorban azért is van, mert a skizofrénia rendkívül változatos és sokszínű klinikai képe mentén igen nagy a változatosság a tekintetben, hogy a különböző tüneteket produkáló betegek mennyire erőszakosak. A jelen tanulmányban a skizofréniahoz köthető, a terrorcselekmények

szempontjából kulcsjelentőségű deviancia kialakulásában leginkább meghatározó tüneteket járjuk körbe. A skizofrénia általános tünettájának tárgyalásán túl kísérletet teszünk annak életszerűbb bemutatására egy hazai terrorcselekmény skizofréniaiban szenvedő elkövetőjének az esetén keresztül. A bemutatott incidenshez hasonló elkövetések és a nemzetközi empirikus adatok alapján az a következtetés vonható le, hogy a magányos elkövetők kapcsán a mentális állapot fokozott figyelmet érdemel. Erre tekintettel további empirikus adatgyűjtés szükséges, mely tudás várhatóan nagyban hozzájárul a terrorizmussal folytatott küzdelem sikerességéhez.

**Kulcsszavak:** pszichiátria, kriminálpszichológia, terrorizmus, skizofrénia, magányos elkövető

## Introduction

Terrorism has been an important problem for decades. Terrorism is an enormous threat to society therefore governments across the world have been trying to conquer its menace towards civilians for decades (Chenoweth 2013; Schmid 2011). Prevention is one of the main pillars of this quest against terrorist activities (Paraskevas-Arendell 2007). Law enforcement and secret service agencies keep collecting data of terrorists and the networks they create with the aim of gaining knowledge that supports professionals in their practice to prevent terrorist attacks (LaFree-Ackerman 2009; Santifort-Jordan-Sandler 2014). Some of these empirical findings are open to public that gives an opportunity to deepen the insight of terrorism even more via research carried out by civilian scientists (LaFree-Dugan 2007; Schuurman 2018). The scientific work based on the application of the databases containing characteristics of terrorism reachable for civilians opens up this field for professions that are normally not included in law enforcement practice (Ivaskevics-Haller 2022). The integration of such sciences into the intelligence that serve the prevention of terrorism can prove its competence a great deal (Kyle et al. 2004). In the present paper the potential importance of psychiatry is examined as a science that may be useful in terrorism management (Stoddard et al. 2011). In the following we briefly retrace the most important field of terrorism in relation to which the use of psychiatry may have any results (Post et al. 2009). Following this the nature of psychiatric disorders will be demonstrated through schizophrenia along with the potential correlation between symptoms and deviancy. Finally, a domestic case will be introduced of an offender arrested for terror activity and diagnosed with schizophrenia.

Among the aforementioned scientific fields that have more and more significant role in the battle against terrorism, psychiatry is certainly not the most utilized one. When it comes to understanding deviant behavior, psychology is the discipline most researchers and practitioners turn to (Crenshaw 2000; Post et al. 2009). Hence the object of psychology is the human psychic and related phenomena, the privileged place of it is logical among sciences studying the human nature (Lefton-Brannon 2005). Although, when the focus is on the abnormal behavior, psychiatry has an unquestionable importance as well, as the medical field treating the

pathological mind and its manifestations (Shorter 2008). When it comes to deviant behavior, mental health is an important factor (Vinkers et al. 2011). The role of mental disorders in the development of deviancy is the subject of intense debate, especially when the accountability of the perpetrator is in the focus (Meynen-Bijlsma 2022). The forensic fields tend to go even further, and some theorists suggest that the presence of extreme deviancy per se can be considered as a potential sign of mental disturbance – and this is also the case in the reverse – since the association of the two has been well known for decades (Crichton 1999; Modestin-Ammann 1995). This connection between deviancy and mental problems is also relevant in relation to terrorism. During the investigation of the ‘terrorist person’ a potential mental trouble is almost always among the aspects of study. No wonder that in recent times several studies have been conducted for the very purpose to discover the importance of mental health in terror activity (Sarma-Carthy-Cox 2022).

## Terrorism and psychiatry

Most empirical findings suggest no major role of mental disorders in relation to terrorism (Khoshnood 2017; Trimbur et al. 2021). Researchers have found that in the case of terrorists certain personality types that fell into the category of pathological tend to be common compared to the normal population, although they are not considered as major psychiatric disorders (Abdolmaleky-Thiagalasingam-Wilcox 2005). The personality types in question mainly correspond to the so called antisocial and narcissistic personality disorders and psychopathy (Corner-Gill 2022; Martens 2004; Tschantret 2021). Personality disorders are accepted as abnormal mental state by the psychiatrist community, although these conditions cannot be treated as mental diseases by the classical means. Personality disorders are defined as constant and pervasive disturbance of emotional regulation, behavior and perception, which affects the whole personality (Widiger-Costa 1994; American Psychiatric Association 2013). They have significant impact on most fields of life, although the most prominent manifestations of them can be observed in social functioning, especially in intimate relations. They certainly affect the morality and can raise the risk of deviant behavior, which is the most characteristic to the antisocial and the narcissistic types (Blair 2001; De Barros-De Pádua Serafim 2008). But

one must keep in mind, that personality disorders are a special subgroup within mental problems. They do interfere with behavior and connection to reality to the level that one loses contact with the outside world. Therefore, the forensic aspects of personality disorders are not that significant compared to the so called major psychiatric disorders – e.g., schizophrenia (Peay 2011). The latter, as we mentioned are not common among terrorists, except for one special group: the lone-actor terrorists. Terrorists in most cases belong to organized groups connected by ideology or shared political agenda (Ganor 2008). The lone-actor terrorist does not have peers and he is not a member of a group. This type of terrorist acts alone and has his own aims that are sometimes irrational or even bizarre, that per se suggests the presence of some mental disorder, which is the case most of the times. One of the main disorders affecting this subgroup is schizophrenia, that can be considered one of the most important major psychiatric disorders. (Prats-Raymond-Gasman 2018; Trimbur et al. 2021

## Schizophrenia

Schizophrenia is a chronic and progressive mental disorder that has important hereditary factors and affects about 1 percent of the population (Saba et al. 2005). Schizophrenia comes in episodes, that means that the person's mental condition is not constantly troubled, but there are periods when the disease is not active, mainly when the patient is under accurate medication. The main symptom of schizophrenia is psychosis. Psychosis is a state of mind, whose essence is the loss of contact with reality. Psychosis can occur on the basis of several psychiatric disorders, and sometimes neurological problems or other conditions as intoxication, internal medicine diseases, etc. Psychoses can manifest in various forms. The most characteristic psychotic phenomena are hallucinations and delusions. Hallucinations are perceptions that lack the external stimulus and only the patient experiences them, they cannot be observed by others. Delusions are ideas the reality of which the patient unwaveringly believes. They can be illogical or extremely bizarre, even if the delusion is extremely surreal the patient totally lacks any insight of its absurdity. It is impossible to make them understand that these beliefs only exist in their minds and they are not based on reality. The psychoses coming with schizophrenia usually triggers hallucinations – mainly the auditory type and delusions. In the table below we briefly introduce a few examples of the hallucinations and delusions that are characteristic of schizophrenia (American Psychiatric Association 2013).

Hallucination and delusions may be the most prominent symptoms of schizophrenia, and they may deteriorate the behavior of the patient the most significant way. Although it does not end there; the complex symptomatology of schizophrenia consists of further phenomena.

**Table 1** | Hallucinations and delusions characteristic to schizophrenia (Andreasen-Flaum 1991)

Hallucination	Auditory	e.g.: mocking, commanding, commenting (Woods et al. 2015)
	Visual	e.g.: dead relatives, ghosts, angels (Brébion et al. 2008)
	Olfactory	e.g.: odor of rotten flesh (Stevenson-Langdon-McGuire 2011)
	Tactil	e.g.: vibration (Stevenson-Langdon-McGuire 2011)
	Visceral	e.g.: movement of organs (Kathirvel-Mortimer 2013)
	Gustatory	e.g.: poison in the food (Connolly-Gittleston 1971)
	Delusions	Persecutive
Paranoid		e.g.: conspiracy of the surroundings against the patient
Religious		e.g.: being chosen by God
Possession		e.g.: demon/devil
Radiation		e.g.: the patient is being attacked by foes by lethal radiation
Erotomania		e.g.: being secretly loved by strangers (Junginger-Barker-Coe 1992)

The current version of the Diagnostic and Statistical Manual of Mental Disorders – DSM 5 TR defines the symptomatology of schizophrenia in the following way (American Psychiatric Association. 2013);

At least two of the following is present for a significant portion of time during a 1-month period

1. Delusions
2. Hallucinations
3. Disorganized speech
4. Grossly disorganized or catatonic behavior
5. Negative symptoms (American Psychiatric Association 2013)

At least one of the symptoms must be either delusions, hallucinations or disorganized speech. Disorganized speech is a direct sign of the disorganization of thinking. It can be observed as loose association – the subject jumps from a topic to another, gives inadequate answers to questions or speaks in word salads – the total lack of coherence of the speech (American Psychiatric Association 2013).

Disorganized behavior or catatonia can occur in various ways. The so-called motor symptoms can range from 'childish silliness' to chaotic agitation. Catatonia is the decreased reactivity to the outer world. It can be manifest in negativism, that is, a stubborn resistance to instructions, mutism – lack of verbal response or maintaining in rigid, sometimes bizarre postures.

Negative symptoms can appear in several forms. The most typical of schizophrenia is the decrease of emotion-

al expressions, the lack of motivation and spontaneous activities, spontaneous speech and the loss of the ability to enjoy pleasures previously appreciated. One of the most prominent negative symptoms is asociality, that means that the patient does not seek the contact with others or even actively avoids social interactions (*American Psychiatric Association 2013*).

Based on the definition of the DSM 5 TR the symptoms must be present for at least a month-long episode (or in case of successful treatment less than a month-long episode). Signs of the disorder must be present during an at least 6-month-long period of time. Other psychiatric disorders or physiological conditions such as drug intoxication must be excluded as triggers of the symptoms (*American Psychiatric Association 2013*).

## Schizophrenia and deviancy

Several empirical studies have investigated the correlates of schizophrenia and deviant behavior. Although schizophrenics – despite the widely spread stereotypes – are by far not the most aggressive psychiatric patients, they are more prone to violence than the normal population. The complex and variant symptomatology of the disease varies the risk of aggression within the schizophrenia group a great deal though. Not all schizophrenics are aggressive but those who are, tend to show extreme levels of violence (*Lindqvist–Allebeck 1990; Fazel et al. 2009*). The heterogeneity in terms of violent tendency shows a significant correlation with the individual characteristic symptoms of the patients (*Matthias 2000*). In the following we attempt to determine the variant of schizophrenic symptoms that tend to raise the risk of deviancy with a special regard to the lone-actor perpetrator type of terrorism. Due to the scope limitation the brief summary below does not exhaust the topic, but that is not the goal either. Here the aim of the author is to give the reader a demonstrative picture of the nature of psychiatry and its role in the battle against terrorism through one of the disorders that preoccupies the field the most.

### Delusions

As I mentioned before delusions are among the most prominent symptoms of schizophrenia. Delusions can alter the behavior of the affected person a great deal. If the delusion has a paranoid or persecutory theme, they can urge the patient to defend himself against the perceived threat. These ideas can reach extreme levels, such as the involvement of governments or secret agencies and trigger significant fear. The patient's experience is that he is under constant attack and the methods of the 'enemies' do not have limits. Especially in the case of delusions typical to schizophrenia, they tend to be surreal and bizarre, so the threat sensed by the patient can be almost impossible to overcome due to its supernatural nature, for example powerful people conspiring with

aliens sending lethal radiation on to his mind. These thoughts are extremely intense, the patient's mind is focused on them and his behavior is controlled by their absolute influence and no one can convince him to reconsider them. This state is prone to be so severe that the patient loses all sense of logic and the capability of reality check. Therefore, paranoid delusions are among the most dangerous risk factors of violence shown by schizophrenics in correlation with terrorism as well (*Walsh–Buchanan–Fahy 2002*).

### Hallucinations

The most common type of hallucination occurring on the basis of schizophrenia is the auditory type. Hallucinations can have a significant impact on the behavior just like delusions. The commanding and mocking auditory hallucinations increase the risk of hostility by schizophrenics. In the first case the hallucination can give specific orders to the patient directed against others. It can be so severe that they give the actual order to kill somebody. Commenting or mocking auditory perception can be dangerous as well, for example they can 'unmask conspiracies or impostors' in the surroundings. Sometimes the auditory symptom uses the voice of people the patient knows, criticizing or disgracing him. All these phenomena can easily trigger aggression. Visual hallucinations can often be a source of aggression. The subject can see for example secret agents, black cars following them, supernatural entities, warning signs, etc. Tactile or odor hallucinations can have a role in the aggressive behavior as well, especially when associated with delusions. It is a quite common case that the patient having poison delusions feels the taste or smell of the toxic agent in the food. A quite special form of pathological perceptive phenomena is the so called cenesthopathy – the patients have a hallucination of odd feelings from the organs. Similarly to the odor hallucinations, cenesthopathy often occurs along with delusions, for example the patient feels vibration in the organs caused by the radiation sent by enemies. As in the case of delusions these experiences are not simple voices or feelings like the normal ones coming from real stimuli. Hallucinations tend to have extreme importance for the patient. In severe cases they are so excessive that the individual is 'lost' in them and cannot pay attention to the outer world. Especially the commanding ones have great power over the person, as they feel obligated to obey to them (*Bjorkly 2002*).

### Disorganized speech

Disorganized speech is the observable manifestation of disorganized thinking. Disorganized thinking associated with schizophrenia tends to range within a wide scale from mildly loosened associations to total chaos both on the level of speech, thinking or conduct. The severely disorganized thinking might have a role in deviancy,



since the behavior that lacks any order easily turns into violence or provokes hostility from the surroundings. Although it has little significance in connection with terrorism, since terrorist attacks require some levels of organization and planning in most cases. Schizophrenic patients committing terrorist activity usually fall into the organized end of the scale mentioned before. Although some levels of disorganization can be observed in almost all cases of schizophrenia only not so severe to consider it disorganization but it can manifest in the loose association characteristic to the cognitive style of the patients. Loose association can result in the tendency to find or – more accurately – read hidden correlations into situations where there are no such relations whatsoever. For example, a patient can find similarity in the names of people and suppose that they have secret alliance against him. This tendency to associate facts or people who are otherwise indifferent to each other can be a strong trigger for paranoia (Arnulf–Robinson–Furnham 2022; Krakowski–Volavka–Brizer 1986).

### *Grossly disorganized or catatonic behavior*

Similarly to disorganized speech disorganized behavior or catatonia can be factors of aggression shown by schizophrenics but rarely of terrorist attacks that demand some levels of organization and thoughtfulness. Maybe the milder versions of catatonia, such as agitation, can increase the risk of such activity, as it gives the patient an overwhelming inner drive to act out the tension caused by fear, although it is certainly not the most important of the circumstances that lead to aggression (Rossi–Swan–Isaacs 2010).

### *Negative symptoms*

Negative symptoms are the least spectacular phenomena triggered by schizophrenia. Negative symptoms have several variants and empirical data about their impact on aggression is controversial. Some research did not find correlation between negative symptoms of schizophrenia and aggression, on the contrary, some authors suggest that these symptoms are protective factors against violence. On the other hand, negative symptoms are the strongest agents of the overall deterioration of the functioning of the patient. Asociality, the decrease of emotional impression and anhedonia often lead to social isolation. The lack of motivation, spontaneous movements and inactivity hinder the patient to fulfill his most important social functions, hence he loses his job and his capability to support himself. These circumstances result in a severe decrease in the quality of life of the patient. The deprivation and poverty the schizophrenic individual has to face in most cases causes further frustration and we can quite often see that the real loss is built into the delusional idea-system and the patient blames their supposed foes for them. A typical example for that situation

when the schizophrenic person is taken under legal guardianship due to his condition. Many of the patients are convinced that their loss of independency is the result of the sabotage carried out by the conspirators with the aim of his destruction. So negative symptoms may not be direct factors of aggression shown by the schizophrenics. Although with the destruction they do in the patient's life, they can increase the frustration that can be a motivation for terror attacks (Krakowski–Czobor–Chou 1999; Mullen 2006).

We briefly discussed the potential risk that schizophrenic symptoms mean in relation to terrorism. In the following, we demonstrate these correlations through a case of a schizophrenic patient arrested for terrorist activity in Budapest.

### **The case**

The subject is a male in his late fifties. In 2013 an incident occurred in Budapest, Hungary that was followed by people intensively. A high-status man attacked his former lover and the notorious case was all over the media in Hungary for months. Although the subject had nothing to do with the event, he decided to follow the court hearing of the case in person. He did not agree with the final decision of the court and had the impression that the whole judicial proceeding was biased and compromised, the decision favored the victim. He was convinced that behind the decision a conspiracy operated that included the government. He thought that this was a superficial gesture with the aim of compensating the fact that Hungary did not join the Istanbul Convention – a human rights treaty of the Council of Europe for the protection of women against domestic violence (Grans 2018). He came to this conclusion realizing that the procedure had several logical counter-narratives that were ignored both by the prosecutor and the judge. He found the court decision unfair – despite the fact that he thought that the convict was basically right, since he found the most realistic scenario in the case that the accused was indeed guilty. Yet, he could not accept the 'fact' that the judgement was not based on clear and correct legal procedure. He had the idea that he is the only one who sees through the unfairness of the situation and it was his duty to make justice. In the spirit of his beliefs, he started a battle against several parties of the case, including the prosecutor and the victim. He kept sending numerous threatening letters and messages to them and gave them aggressive calls. He was reported to the police on several occasions, but it had no effect on him. He was so determined that even after his profile on a social-media platform was blocked, through which he constantly kept harassing the victims, he did not give up, but started to use his 10-year-old son's profile. Finally, he was arrested on charges of several felonies including terrorist activity.

### *The background of the subject*

The subject was a widower – he lost his wife a few years before his arrest, that will be explained later. He had a one-year-old son, whom he took care of alone since the death of his wife. He was a mathematician, but he did not have a job for months when he started his criminal activity. It was not clear why he lost his job. He has no psychiatric treatment in his medical antecedent and had not committed any crimes before. He had no significant physiological disease, he did not drink alcohol, smoke or use drugs. His wife suffered from cancer that was in terminal state, that stress she could not handle, so she committed suicide, she jumped from the window of the same room where his husband – the subject – and his son was sleeping. This loss hugely impacted both the subject's emotional state and everyday life. Although the subject led a somewhat functional life prior to the death of his wife, it could be assumed that he was rather dependent on her and she managed most of his every-day affairs. He had poor social relations and lived a somewhat secluded lifestyle.

### *Psychiatric assessment and diagnoses*

After the arrest a forensic psychiatric examination was ordered by court hence the irrational nature of the offence. During the assessment the patient was diagnosed with schizophrenia. Given the pathological mental state the Forensic Psychiatric and Mental Institution in Budapest was named as the place of the detention. During the observation of the subject the diagnoses of schizophrenia was confirmed. The paranoid delusions of the subject were persistent, resistant to any argument and altered his conduct a great deal. In the beginning of his psychiatric treatment his condition was so severe that his irritability often turned into physical aggression. His behavior was somewhat disorganized, he showed significant levels of agitation and impulsivity. During explorative sessions his mind was focused on the subject of his delusions and in the beginning of the treatment it was impossible to turn his attention away from them. His thinking was mildly disorganized that reached a level of becoming incoherent when the theme of his paranoid ideas was in the focus of conversation. The paranoid delusion was solid, formed a system of ideas and was perseverative, that are typical to schizophrenia (Cridler 1997). In the antecedent an important deterioration of the overall functioning could be found that had appeared along with the onset of the disorder. Although the age of the subject was rather old for a first episode of schizophrenic psychoses – schizophrenia usually starts in the late adolescent or early adulthood – the phenomenon of late-onset schizophrenia is well-known for the psychiatric field (Gogtay et al. 2011; Vahia, et al. 2010). Based on the reports of the patient and relatives only little information was achievable about his previous lifestyle, but it could be assumed

that the patient had had a somewhat eccentric character prior to the first signs of the disorder, that fits the criteria of the so-call premorbid personality typical of schizophrenia – some authors suggest that schizophrenia does not come out of 'nowhere', but there are early signs in the personality that can be identified in retrospect once the disorder is fully developed (Peralta–Cuesta–de Leon 1991). The significant trauma that the subject had to suffer – the tragic and violent loss of his wife – could be taken as external stressor that usually occurs before the first episode and provokes the onset of the otherwise endogenous disorder, genetically determined (Zubin–Steinhauer–Condray 1992).

As we can see in the case of our subject schizophrenia was not only a crucial factor of the crime, but the one and only motivation. The paranoid delusion took over control of his behavior so much that even the numerous reports against him did not stop his activity. When he got into the forensic psychiatric institution his only concern was that the institutional staff did not believe him and justice was not done, his personal future was irrelevant, which illustrates the severe nature of his condition and the lack of reality checking. Hallucination was not present during his observation, but he showed signs of a tendency to attribute significance to otherwise neutral stimuli which suggest a moderately affected perception. This certainly had an impact on his conduct hence his deviant attitude, especially when he perceived innocent gestures offensive. The disorganized speech and thinking were observed on several occasions. Although it was not so typical in person, the letters he had written to the victims contained incoherent sentences and sometimes words that lacked any sense. But this level of disorganization of thinking did not hinder him to carry out his delusional goals. Yet, it certainly made the job of the police easier, since the clumsiness characteristic to schizophrenics when committing an offence was observable in the case of the subject and it could be attributed to the cognitive aspects of his condition (American Psychiatric Association 2013). For example, when his Facebook profile was blocked, he started to use his son's profile instead of creating a new one. Disorganized behavior was not characteristic of the subject's behavior, but agitation was strongly there. Even based on the letters he wrote, one could easily recognize the frustration and tension the offender experienced. The intensive harassing and endurance he showed in his activity suggest so. This vehemence was an important aspect of the crime, and it probably would have led to more serious acts, if the situation had the opportunity to escalate to a more severe level. The subject showed serious negative symptoms. The lack of activity and indifference to any other subject other than the paranoid delusion hindered him to get a job, and the loss of the previous one was probably due to his condition. The decrease of sociodemographic status was a possible factor in his frustration, although the subject denied that, the idea that only he can

do justice in the case suggested some kind of compensation for his loss of social status. The social isolation and the indifference towards any social relations deprived him of the opportunity of intervention by loved ones or professionals. In summary, the whole complex symptomatology of schizophrenia contributed to his actions and most individual symptoms can be considered as a trigger in the crime.

## Summary

In the present paper an attempt was made to demonstrate the importance of clinical sciences in the multidisciplinary conquest against crime, with special regard to psychiatry and terrorism. We briefly discussed the role of psychiatric disorders in terrorism and found that the most important type is the lone-actor terrorist in which case mental disorders have significance. We introduced one of the most important psychiatric disorders with special regard to the symptomatology and its actual role in the development of terrorist activity. At last, through a domestic case, we tried to make this relation more comprehensible. Hopefully the purpose of this publication has been fulfilled and for the reader it could provide a deeper insight into the nature of a psychiatric disorder and its correlation with deviancy.

## Literature

- Abdolmaleky, H. M., Thiagalingam, S., & Wilcox, M. (2005) Genetics and epigenetics in major psychiatric disorders. *American Journal of Pharmacogenomics*, Vol. 5. No. 3. pp. 149–160. <https://doi.org/10.2165/00129785-200505030-00002>
- American Psychiatric Association. (2013) *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>. Source: <https://wr1ter.com/how-to-cite-a-dsm-5-in-apa>
- Andreasen, N. C., & Flaum, M. (1991) Schizophrenia: The characteristic symptoms. *Schizophrenia Bulletin*, Vol. 17. No. 1. pp. 27–49. <https://doi.org/10.1093/schbul/17.1.27>
- Arnulf, J. K., Robinson, C., & Furnham, A. (2022) Dispositional and ideological factor correlate of conspiracy thinking and beliefs. *PLoS ONE*, Vol. 17. No. 10. e0273763. <https://doi.org/10.1371/journal.pone.0273763>
- Bjørkly, S. (2002) Psychotic symptoms and violence toward others – a literature review of some preliminary findings. *Aggression and Violent Behavior*, Vol. 7. No. 6. pp. 605–615. [https://doi.org/10.1016/s1359-1789\(01\)00050-7](https://doi.org/10.1016/s1359-1789(01)00050-7)
- Blair, R. J. R. (2001) Advances in neuropsychiatry: Neurocognitive models of aggression, the antisocial personality disorders, and psychopathy. *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 71. No. 6. pp. 727–731. <https://doi.org/10.1136/jnnp.71.6.727>
- Brébion, G., Ohlsen, R. I., Pilowsky, L. S., & David, A. S. (2008) Visual hallucinations in schizophrenia: Confusion between imagination and perception. *Neuropsychology*, Vol. 22. No. 3. pp. 383–389. <https://doi.org/10.1037/0894-4105.22.3.383>
- Chenoweth, E. (2013) Terrorism and democracy. *Annual Review of Political Science*, Vol. 16. pp. 355–378.
- Connolly, F. H., & Gittleson, N. L. (1971) The relationship between delusions of sexual change and olfactory and gustatory hallucinations in schizophrenia. *British Journal of Psychiatry*, Vol. 119. No. 551. pp. 443–444. <https://doi.org/10.1192/bjp.119.551.443>
- Corner, E., & Gill, P. (2022) Psychopathy and terrorist involvement. *Psychopathy and Criminal Behavior*. pp. 389–402. <https://doi.org/10.1016/b978-0-12-811419-3.00017-0>
- Crenshaw, M. (2000) The psychology of terrorism: An agenda for the 21st century. *Political Psychology*, Vol. 21. No. 2. pp. 405–420. <https://doi.org/10.1111/0162-895x.00195>
- Crichton, J. (1999) Mental disorder and crime: Coincidence, correlation and cause. *The Journal of Forensic Psychiatry*, Vol. 10. No. 3. pp. 659–677. <https://doi.org/10.1080/09585189908402166>
- Crider, A. (1997) Perseveration in schizophrenia. *Schizophrenia Bulletin*, Vol. 23. No. 1. pp. 63–74.
- De Barros, D. M., & De Pádua Serafim, A. (2008) Association between personality disorder and violent behavior pattern. *Forensic Science International*, Vol. 179. No. 1. pp. 19–22. <https://doi.org/10.1016/j.forsciint.2008.04.013>
- Fazel, S., Gulati, G., Linsell, L., Geddes, J. R., & Grann, M. (2009) Schizophrenia and violence: Systematic review and meta-analysis. *PLoS Medicine*, Vol. 6. No. 8. e1000120. <https://doi.org/10.1371/journal.pmed.1000120>
- Ganor, B. (2008) Terrorist organization typologies and the probability of a boomerang effect. *Studies in Conflict & Terrorism*, Vol. 31. No. 4. pp. 269–283. <https://doi.org/10.1080/10576100801925208>
- Gogtay, N., Vyas, N. S., Testa, R., Wood, S. J., & Pantelis, C. (2011) Age of onset of schizophrenia: Perspectives from structural neuroimaging studies. *Schizophrenia Bulletin*, Vol. 37. No. 3. pp. 504–513.
- Grans, L. (2018) The Istanbul Convention and the positive obligation to prevent violence. *Human Rights Law Review*, Vol. 18. No. 1. pp. 133–155.
- Ivaskevics, K., & Haller, J. (2022) Risk matrix for violent radicalization: a machine learning approach. *Frontiers in Psychology*, Vol. 13. <https://doi.org/10.3389/fpsyg.2022.745608>
- Junginger, J., Barker, S., & Coe, D. A. (1992) Mood theme and bizarreness of delusions in schizophrenia and mood psychosis. *Journal of Abnormal Psychology*, Vol. 101. No. 2. pp. 287–292. <https://doi.org/10.1037/0021-843x.101.2.287>
- Kathirvel, N., & Mortimer, A. (2013) Causes, diagnosis and treatment of visceral hallucinations. *Progress in Neurology and Psychiatry*, Vol. 17. No. 1. pp. 6–10. <https://doi.org/10.1002/pnp.262>
- Khoshnood, A. (2017) The correlation between mental disorders and terrorism is weak. *BJPsych Bulletin*, Vol. 41. No. 1. pp. 56–56. <https://doi.org/10.1192/pb.41.1.56>
- Krakowski, M., Czobor, P., & Chou, J. C. Y. (1999) Course of violence in patients with schizophrenia: Relationship to clinical symptoms. *Schizophrenia Bulletin*, Vol. 25. No. 3. pp. 505–517. <https://doi.org/10.1093/oxfordjournals.schbul.a033397>
- Krakowski, M., Volavka, J., & Brizer, D. (1986) Psychopathology and violence: A review of literature. *Comprehensive Psychiatry*, Vol. 27. No. 2. pp. 131–148. [https://doi.org/10.1016/0010-440x\(86\)90022-2](https://doi.org/10.1016/0010-440x(86)90022-2)
- Kyle, R. R., Via, D. K., Lowy, R., Madsen, J. M., Marty, A. M., & Mongan, P. D. (2004) A multidisciplinary approach to teach responses to weapons of mass destruction and terrorism using combined simulation modalities. *Journal of Clinical Anesthesia*, Vol. 16. No. 2. pp. 152–158. <https://doi.org/10.1016/j.jclinane.2003.09.003>
- LaFree, G., & Ackerman, G. (2009) The empirical study of terrorism: Social and legal research. *Annual Review of Law and Social Science*, Vol. 5. No. 1. pp. 347–374. <https://doi.org/10.1146/annurev.lawsocsci.093008.131517>
- LaFree, G., & Dugan, L. (2007) Introducing the Global Terrorism Database. *Terrorism and Political Violence*, Vol. 19. 2. pp. 181–204. <https://doi.org/10.1080/09546550701246817>
- Lefton, L. A., & Brannon, L. (2005) *Psychology*, London, Pearson Education.



- Lindqvist, P., & Allebeck, P. (1990) Schizophrenia and crime. *British Journal of Psychiatry*, Vol. 157. No. 3. pp. 345–350. <https://doi.org/10.1192/bjp.157.3.345>
- Martens, W. H. J. (2004) The terrorist with antisocial personality disorder. *Journal of Forensic Psychology Practice*, Vol. 4. No. 1. pp. 45–56. [https://doi.org/10.1300/j158v04n01\\_03](https://doi.org/10.1300/j158v04n01_03)
- Matthias, C. A. (2000) Schizophrenia and violence. *Acta Psychiatrica Scandinavica*, Vol. 102. pp. 63–67. <https://doi.org/10.1034/j.1600-0447.2000.00012.x>
- Meynen, G., & Bijlsma, J. (2022) Culpability and accountability: The insanity defense. *Clinical Forensic Psychology*. pp. 555–566. [https://doi.org/10.1007/978-3-030-80882-2\\_28](https://doi.org/10.1007/978-3-030-80882-2_28)
- Modestin, J., & Ammann, R. (1995) Mental disorders and criminal behaviour. *British Journal of Psychiatry*, Vol. 166. No. 5. pp. 667–675. <https://doi.org/10.1192/bjp.166.5.667>
- Mullen, P. E. (2006) Schizophrenia and violence: From correlations to preventive strategies. *Advances in Psychiatric Treatment*, Vol. 12. No. 4. pp. 239–248. <https://doi.org/10.1192/apt.12.4.239>
- Paraskevas, A., & Arendell, B. (2007) A strategic framework for terrorism prevention and mitigation in tourism destinations. *Tourism Management*, Vol. 28. No. 6. pp. 1560–1573. <https://doi.org/10.1016/j.tourman.2007.02.012>
- Peay, J. (2011) Personality disorder and the law: Some awkward questions. *Philosophy, Psychiatry, & Psychology*, Vol. 18. No. 3. pp. 231–244. <https://doi.org/10.1353/ppp.2011.0035>
- Peralta, V., Cuesta, M. J., & de Leon, J. (1991) Premorbid personality and positive and negative symptoms in schizophrenia. *Acta Psychiatrica Scandinavica*, Vol. 84. No. 4. pp. 336–339.
- Post, J. M., Ali, F., Henderson, S. W., Shanfield, S., Victoroff, J., & Weine, S. (2009) The psychology of suicide terrorism. *Psychiatry: Interpersonal and Biological Processes*, Vol. 72. No. 1. pp. 13–31. <https://doi.org/10.1521/psyc.2009.72.1.13>
- Prats, M., Raymond, S., & Gasman, I. (2018) Religious radicalization and lone-actor terrorism: A matter for psychiatry? *Journal of Forensic Sciences*, Vol. 64. No. 4. pp. 1253–1258. <https://doi.org/10.1111/1556-4029.13992>
- Rossi, J., Swan, M. C., & Isaacs, E. D. (2010) The violent or agitated patient. *Emergency Medicine Clinics of North America*, Vol. 28. No. 1. pp. 235–256. <https://doi.org/10.1016/j.emc.2009.10.006>
- Saha, S., Chant, D., Welham, J., & McGrath, J. (2005) A systematic review of the prevalence of schizophrenia. *PLoS Medicine*, Vol. 2. No. 5. e141. <https://doi.org/10.1371/journal.pmed.0020141>
- Sarma, K. M., Carthy, S. L., & Cox, K. M. (2022) PROTOCOL: Mental disorder, psychological problems and terrorist behaviour: A systematic review. *Campbell Systematic Reviews*, Vol. 18. No. 2. e1249. <https://doi.org/10.1002/cl2.1249>
- Santifort-Jordan, C., & Sandler, T. (2014) An empirical study of suicide terrorism: A global analysis. *Southern Economic Journal*, Vol. 80. No. 4. pp. 981–1001. <https://doi.org/10.4284/0038-4038-2013.114>
- Schmid, A. P. (2011) The definition of terrorism. In: *The Routledge handbook of terrorism research*. Location, Routledge. pp. 39–157.
- Schuurman, B. (2018) Research on Terrorism, 2007–2016: A review of data, methods, and authorship. *Terrorism and Political Violence*, Vol. 32. No. 5. pp. 1011–1026. <https://doi.org/10.1080/09546553.2018.1439023>
- Shorter, E. (2008) History of psychiatry. *Current Opinion in Psychiatry*, Vol. 21. No. 6. pp. 593–597. <https://doi.org/10.1097/ycp.0b013e32830aba12>
- Stevenson, R. J., Langdon, R., & McGuire, J. (2011) Olfactory hallucinations in schizophrenia and schizoaffective disorder: A phenomenological survey. *Psychiatry Research*, Vol. 185. No. 3. pp. 321–327. <https://doi.org/10.1016/j.psychres.2010.07.032>
- Stoddard, F. J., Gold, J., Henderson, S. W., Merlino, J. P., Norwood, A., Post, J. M., ... & Katz, C. L. (2011) Psychiatry and terrorism. *Journal of Nervous & Mental Disease*, Vol. 199. No. 8. pp. 537–543. <https://doi.org/10.1097/nmd.0b013e318225ee90>
- Trimbur, M., Amad, A., Horn, M., Thomas, P., & Fovet, T. (2021) Are radicalization and terrorism associated with psychiatric disorders? A systematic review. *Journal of Psychiatric Research*, Vol. 141. pp. 214–222. <https://doi.org/10.1016/j.jpsychires.2021.07.002>
- Tschantret, J. (2021) The psychology of right-wing terrorism: A text-based personality analysis. *Psychology of Violence*, 11(2), 113–122. <https://doi.org/10.1037/vio0000362>
- Vahia, I. V., Palmer, B. W., Depp, C., Fellows, I., Golshan, S., Kraemer, H. C., & Jeste, D. V. (2010) Is late-onset schizophrenia a subtype of schizophrenia? *Acta Psychiatrica Scandinavica*, Vol. 122. No. 5. pp. 414–426.
- Vinkers, D. J., Beurs, E., Barendregt, M., Rinne, T., & Hoek, H. W. (2011) The relationship between mental disorders and different types of crime. *Criminal Behaviour and Mental Health*, Vol. 21. No. 5. pp. 307–320. <https://doi.org/10.1002/cbm.819>
- Walsh, E., Buchanan, A., & Fahy, T. (2002) Violence and schizophrenia: Examining the evidence. *British Journal of Psychiatry*, Vol. 180. No. 6. pp. 490–495. <https://doi.org/10.1192/bjp.180.6.490>
- Widiger, T. A., & Costa Jr, P. T. (1994) Personality and personality disorders. *Journal of Abnormal Psychology*, Vol. 103. No. 1. p. 78.
- Woods, A., Jones, N., Alderson-Day, B., Callard, F., & Fernyhough, C. (2015) Experiences of hearing voices: Analysis of a novel phenomenological survey. *The Lancet Psychiatry*, Vol. 2. No. 4. pp. 323–331. [https://doi.org/10.1016/s2215-0366\(15\)00006-1](https://doi.org/10.1016/s2215-0366(15)00006-1)
- Zubin, J., Steinhauer, S. R., & Condray, R. (1992) Vulnerability to relapse in schizophrenia. *The British Journal of Psychiatry*, Vol. 161. No. S18. pp. 13–18.