



This is an open access article under the  
Creative Commons Attribution 4.0  
International License

# INDIRECT WITNESSES OF TERRORIST ACTS: PSYCHOLOGICAL CONSEQUENCES OF INTIMIDATION

**Sergii Boltivets**

State Institute of Family and Youth Policy of Ukraine, Ukraine  
E-mail: boltivetssergij@i.ua

**Olga Okhremenko**

National Security Service Academy of Ukraine, Ukraine  
E-mail: oorkyiv@gmail.com

## Abstract

*The victimhood of indirect witnesses of terrorist acts, which includes both the audience of the media and the population as a whole, is a complex socio-psychological phenomenon. The reasons victimizations are changes in the system of internal regulation of behavior, namely contradictions between the basic beliefs of people and the real consequences of terrorist acts, which are subjectively perceived as an unexpected, uncertain threat to existence (both objective and subjective), the irreparability of what can happen. Among the indirect witnesses were singled three response styles: slightly negative assessment, partial justification of the perpetrators of a terrorist act, negative emotional assessment with expressed anxiety.*

*The most significant consequences of the psychological impact of terrorist acts on the media audience and the general population should be considered: the contradiction between the basic ideas of people and the reality demonstrated by the media: the subjective and objective unexpectedness of a terrorist act; incorrigibility of the offense.*

*Shown, that psychological countermeasures should be based on the information component aimed at preventing inappropriate reactions, especially in the first days after the terrorist act, development and demonstration of optimal algorithms of behavior; prevent recourse to unconscious or subconscious impulses that violate basic illusions existence.*

*With the presence of drivers that trigger patterns of victim-induced behavior, the media can provoke in the general population a massive loss of social and personal identity, meaning of life, prospects, to form a complex of inferiority, to induce certain adverse behaviors. The most significant consequences of the psychological impact of terrorist acts on the audience of the media and the general population should be considered the contradiction between the basic ideas of people (activate the images of death, destruction, horror of nothingness, which subconsciously everyone has. These "forms of the unspoken" violate three basic illusions of existence: the illusion of one's own immortality, the illusion of justice, the illusion of the hidden meaning of life) and the reality published by the media, which is subjectively perceived as a threat to existence; subjective and objective unexpectedness of a terrorist act; incorrigibility of the committed. Psychological measures to combat victimization should be based on the dominance of the information component of counteraction aimed at preventing dangerous reactions, especially in the first hours after the commission of a terrorist act, the development and demonstration of optimal behavioral algorithms.*

**Keywords:** indirect witnesses, terrorist attack, psychological measures, induced behavior; optimal algorithms

## Introduction

In a number of countries, terrorism is becoming an almost everyday reality, a necessity for certain groups of the population to live alongside dangerous, destructive and violent acts. The number of terrorist acts is growing, and most experts do not predict their reduction in the near future. Therefore, the problem of preventive and compensatory anti-terrorist measures attracts the attention of a wide range of researchers and becomes interdisciplinary (Hoffman, 2017; Glad et al., 2021).

The number of terrorist acts is growing all over the world. The number of deaths from terrorist acts is constantly growing too. Some studies (Smith & Zeigler, 2017; Horgan, 2017) pointed out that, the number of terrorist attacks increases both during military operations and after wars. This provokes a negative public reaction, multiplies the feeling of threat, anxiety and fear and has a detrimental effect on the mental and physical health of media users.

In these situations, the number of provocative reports about these events is growing rapidly. The number of terrorist organizations and lone terrorists is increasing. The task of modern-day terrorism is trying to provoke fear for the sake of fear and at last resort to achieve destabilization. Even if terrorist groups do not offer another social model, they destroy the foundations of society. After all, it is not so much the demonstration of violence as the threat of its recurrence that supports the feeling of fear and is the basis of psychological pressure on the government and the general public.

Thus, a survey of residents of Budyonnovsk (Russian Federation) after the terrorist attack in the summer of 1995 makes it possible to assess the reaction of involuntary indirect witnesses – residents of this area. The first reaction - the atmosphere of confusion and fear that prevailed in the first days after the attack, quickly grew into a feeling of helplessness, helplessness, anxious anticipation of new threats and willingness or unwillingness to defend themselves from them. This was accompanied by behavioral and activity disorders almost complete disability, concentration on traumatic events, and a pandemic of panic rumors.

In September 1986, on the first day after a series of terrorist attacks in the French capital, terror, fear of death, and confusion prevailed among the population. The second day was dominated by feelings of compassion, unity and resentment. On the third day, most respondents felt grief, fear, doubt, and a willingness to surrender to terrorists: “It is better to leave Lebanese Christians alone with the terrorist threat, although it looks like a betrayal, but can ensure peace...” In July 1995 after the explosion in the subway at Saint-Michel station, psychologists provided assistance to people with “early” (for 4-5 weeks) and chronic forms of violations, including indirect witnesses to the terrorist attack, high-profile terrorist acts Manchester Arena bombing on May 2017, in the Carcassone and Trebes on March 2018.

Glad et al. (2021) found that after terrorist attack most survivors had negative repercussions for the survivors’ mental and somatic health for years after the attack, including symptoms of posttraumatic stress, anxiety, depression, complicated grief, headache, and other somatic symptoms. Exposure to the attack also led to long-term functional impairment for many people.

Studies in the United States, Europe, and Russia have shown that media audiences and the public, as indirect witnesses to a terrorist act, experience emotional shock of varying intensity, the effects of which persist for a long time and cause varying degrees of self-perception to the development of victimhood. This focus of influence has allowed scientists to single out victims and witnesses of terrorism. The victims include persons physically involved in a terrorist act: hostages, victims of violence (explosions, destruction, mass poisoning, etc.), persons whose property is destroyed, who are deprived of livelihoods.

Witnesses to terrorism are persons who have directly or indirectly observed a terrorist act or its consequences.

Direct witnesses include: special services and law enforcement officers who took part in the cessation of terrorist activities; legal entities responsible for strategic objects; rescuers, medics who provided assistance to the victims; families, close environment of victims. These professionals end up with the same psychological disorders (secondary trauma) as the victims (Yilmaz, 2021).

Indirect witnesses include: the media audience that observed the terrorist attack, its consequences, or heard the stories of victims and witnesses in video or audio formats; the population of the country as a whole; international and state institutions, states, political parties, other public organizations, politicians and public figures whom terrorists try to force to make appropriate decisions.

At the same time, theoretical and practical developments of this problem in psychology, unfortunately, there are few gaps in research on a number of aspects, such as the impact of terrorist acts on the mental health of mediated witnesses. That is why the aim of the article was to analyze the psychological profile of media users.

## Research Methodology

The theoretical approach is that the study, interpretation and impact on the mental phenomenon of victim shifts should be carried out in the context of personality as a whole, taking into account its individuality, uniqueness. The research was conducted using a questionnaire. A questionnaire with 86 assertions was used, developed and tested by M. Kryshstal and O. Onysko<sup>1</sup>. Questionnaires were processed of 100 respondents of Kyiv (Ukraine) aged 18 to 55 years, who constantly watched television reports on terrorist attacks, terrorist acts and their consequences during 2015-2017. The survey was conducted from December 1, 2017 until June 15, 2018.

It was necessary to indicate your agreement with a certain statement, noting its serial number with a circle. Processing of nonparametric data was performed by cluster analysis based on the applied statistical package Statgraphics. Processing of the obtained results was performed by the method of cluster analysis on the basis of the applied statistical package Statgraphics. The Ward method was chosen by the method of clustering to avoid noise and restore the data structure. The quality of the obtained classifications was evaluated by the maximum entropy:

$$H_{\max} = \log_2 I, \text{ where } I \text{ is the number of clusters}$$

Serial numbers of the answers (that are categorized in clusters) are given in the table. The calculation of the frequency of numbers of selected statements in the cluster was performed in EXCEL using the function "frequency". For analysis, the authors chose statements with a frequency of occurrence  $f(k,t)$ , where  $k$  are individuals. Included in a particular cluster,  $t$  – this or that statement. To identify the psychological profile of persons included in these clusters, the authors correlated the results with other answers of each respondent.

This allowed us to identify three styles of response: a pronounced negative assessment (1-t cluster), partial justification of the actions of the perpetrators of a terrorist act (2-ed cluster) and expressed anxiety with a negative emotionally colored assessment (3-rd cluster).

To identify the psychological profile of persons included in these clusters, the authors correlated the results with other answers of each respondent. The calculation of the frequency of occurrence of the numbers of the selected statements in the specified intervals was performed in EXCEL using the function "frequency". For analysis, the authors chose a statement with the frequency with which it occurs as  $f(k, t)$ , where  $k$  is the person, included in a particular cluster,  $t$  - a this or that statement.

1 Кришталь М.А. Методичні рекомендації щодо діагностики і психокорекції віктимності осіб, постраждалих від надзвичайних ситуацій природного і техногенного характеру / М.А. Кришталь, О.О. Онисько. – Черкаси : Академія пожежної безпеки імені Героїв Чорнобиля, 2013. – 54 с.  
Crystal M.A., Onysko O.O. Methodical recommendations for the diagnosis and psychocorrection of victimhood of persons affected by emergencies of natural and man-made nature. - Cherkasy: Academy of Fire Safety named after the Heroes of Chernobyl, 2013. - 54 p.

**Table**  
*The Results of Cluster Analysis*

Statements and corresponding reactions	1 cluster (50 respondents)	2 cluster (19 respondents)	3 cluster (30 respondents)
Approval number	N1 <sub>35</sub> , N5 <sub>48</sub> , N6 <sub>29</sub> , N10 <sub>31</sub> , N14 <sub>44</sub> , N15 <sub>28</sub> , N17 <sub>26</sub> , N21 <sub>3</sub> , N79 <sub>41</sub> , N85 <sub>21</sub>	N2 <sub>11</sub> , N4 <sub>14</sub> , N5 <sub>19</sub> , N16 <sub>12</sub> , N18 <sub>12</sub> , N19 <sub>13</sub> , N21 <sub>14</sub> , N22 <sub>19</sub> , N38 <sub>12</sub> , N42 <sub>18</sub> , N53 <sub>19</sub> , N56 <sub>16</sub> , N57 <sub>17</sub> , N60 <sub>13</sub>	N5 <sub>15</sub> , N29 <sub>15</sub> , N31 <sub>17</sub> , N35 <sub>27</sub> , N40 <sub>16</sub> , N41 <sub>17</sub> , N61 <sub>25</sub> , N62 <sub>28</sub> , N63 <sub>22</sub> , N64 <sub>21</sub> , N65 <sub>26</sub>
Reaction	expressed negative assessment partial	justification of actions of perpetrators of a terrorist act	expressed anxiety with negative emotional assessment

Note: N 1 - N 85 - serial numbers of assertions; in indices (for example <sub>48</sub> or <sub>12</sub>) the number of respondents who have chosen this or that statement is specified.

## Research Results

The obtained results allow to distinguish two groups of persons:

- 1) Compensated persons (1 cluster) who need explanations and insignificant psychological support);
- 2) Persons with signs of internal disharmony (2nd and 3rd cluster). They need to be provided with more detailed information support, clarification of personal characteristics and means of their correction.

Demonstrations of violence in the media generate mostly anger (serial number N1) and compassion (serial number N5) in the part of the media audience classified in 1 cluster. But they are sure that such events do not threaten them and their relatives, and do not cause concern for them in future (serial number N22). In the personal profile of these people there is courage (serial number N6), reluctance to worry in everyday life (serial number N10), endurance (serial number N14), realism (serial number N15), practicality (serial number N17). However, most note the complex problems of life (serial number N 85) and the indifferent attitude of others to their social and personal problems (serial number N 79).

In the 2nd cluster (22 people), information about terrorist attacks causes feelings of insecurity (serial number N19), fears for the future of their loved ones (serial number N22), fear of violence (serial number N38), provokes feelings of danger (serial number N45), promotes the transmission of negative states. In this process, there are fears of possible loss of economic status (serial number N42), possible loss of relatives (serial number N53) and friends (serial number N56), and possible forced change of residence (serial number N60). At the same time, they believe that those who have committed a terrorist act may have a certain motivation that justifies their actions: they could be coerced (serial number N2), they thus fight for their rights (serial number N4), such acts can be pushed by social, economic living conditions, personal tragedy, etc. (serial number N18), they express dissatisfaction with the existing social order and leaders who failed to prevent terrorist attacks (serial number N57). The personal profile of these people is characterized by indecision, a tendency to doubt and hesitation (serial number N16), attempts to plan and anticipate their relationships, the course of important tasks (serial number N21).

The media audience in cluster 3 is characterized by persistent anxiety after reviewing information about terrorist attacks (serial number N63), for a long time returning to the thoughts seen, heard or read on the Internet about the terrorist attack (serial number N64), the feeling of surprise that happened (serial number N62); feeling irreparable (serial number N61). Such individuals indicate their low stress resistance and adaptability (serial number N31), they have a prolonged feeling of low mood (serial number N29); vaguely defined own

stable orientations to the future (serial number N35), impulsiveness (serial number N39). The psychological profile of this layer of the media audience shows a reluctance to defend their position (serial number N40), to take responsibility for decision-making in problematic situations (serial number N41), a tendency to be influenced by others (serial number N65)

## Discussion

For a more detailed analysis of indirect witnesses' psychological features, the focus should be on the personal profile of persons included in clusters 2 and 3 (second and third psychological profiles, respectively).

The second psychological profile is characterized by a sense of danger. This feeling on a mental level is transformed into a feeling of insecurity, fear for their future and the future of their loved ones. Insufficient awareness of danger is manifested in anxiety attacks, gloomy feelings, the growth of situations that are subjectively perceived as unpredictable, uncertain and threatening, the development of which and the time of occurrence is unpredictable. There are elements of the cognitive component - the concretization of danger, its correlation with a particular stimulus and the object that is felt as fear. It should be noted that psychosomatic signs of anxiety (serial numbers of assertion N65-69) were not detected in any case. Anxiety is directed to the future and to some extent reduces feelings of empathy, compassion (serial number of assertion N5).

Along with these characteristics in the psychological profile there is a willingness to accept the position of another as justified, a willingness to obey the environment. These characteristics are a manifestation of an unconscious protective reaction to potentially dangerous social situations. Subjective assessment of one's own helplessness in certain circumstances can be transformed into the Stockholm syndrome.

The formation of episodic anxiety attacks is facilitated by the perception of the surrounding world as dangerous, anxious distrust in the form of various fears for the future (serial number of assertion N 5), ease of obsessions, thoughts (serial number of assertion N29), indecision (serial number of assertion N40) and as hyper compensation - impulsiveness (serial number of assertion N31), and the latter reduces the ability to think logically (serial number of assertion N41).

Such symptoms are characteristic of people with personal anxiety. The personal anxiety of this category of media audience is related to the motivation to avoid (serial number of assertion N35). Our survey was not focused on identifying signs of neuroticism, but since there is a certain decrease in the adaptive capacity of the person, it is highly probable that this sign is present in most third-person individuals.

Persons included in the second profile are likely to develop role victimhood, which will be based on one or another type of victim behavior (in the form of position, status, actions) with the readiness of the individual to a specific reaction that leads to deformation of their relationship and life in the short and long term.

The properties of the third profile are a potential threat to the formation of personal victimhood as a means of adaptation to acute conflict due to mainly personal qualities that are decisive in the ability to become a victim. Every person killed has one or another experience of the victim. But the persons included in the third profile are characterized by a specifically modified disposition system, which covers the implemented or latent algorithms of the victim's behavior. Destructively changed behavioral algorithms are implemented at different levels:

- 1) The reaction of the subjects to the current visual situation of the terrorist act is characterized by a significant emotional response: the more pronounced it is, the faster the stabilization and consolidation of specific behavioral, mental and emotional reactions;
- 2) On the basis of the formed reactions a certain subjective correspondence between social situations and the unconscious need for security of the mediated witness is fixed;

- 3) The formed subjective correspondence subconsciously begins to transform the components of the response not yet involved in the new structure;
- 4) A purposeful sequence of changes at levels 1-3 leads to impulsive victim reactions and, subsequently, to poorly controlled impulsive victim behaviors;
- 5) Changes at levels 1-4 under certain social conditions can stabilize and form a holistic, comprehensive victim behavior in various areas of human life, which covers not only cognitive, emotional and behavioral elements, but also their various levels - from fixed attitudes to values.

This dispositional system is a mechanism of victimization.

Mass victimization of the consciousness of the media audience consists of:

- 1) A set of vulnerable potentials, the audience as a whole and individual sectors of the audience;
- 2) Imitation of certain components of the dispositional system of the victimized person.

Situational victimization of the media audience depends on the social situation, personal characteristics and the degree of social protection. To prevent the victimization of mediated witnesses to terrorist acts, a realistic and objective form of media information is needed:

- 1) Development and demonstration of optimal algorithms of behavior in critical situations;
- 2) Increasing the level of protection of the population as a whole and officials whose decisions and behavior are being pressured by terrorists;
- 3) Development of psychological measures to prevent the formation of victim forms of behavior among the general population.

It is equally important to prevent the use of mainly unconscious or subconscious impulses of the media audience. However, the media, covering the situation of terrorist acts, often intensify the images of death, destruction, horror of nothingness, which subconsciously everyone has. These "forms of the unspoken" violate three basic illusions of existence: the illusion of one's own immortality, the illusion of justice, the illusion of the hidden meaning of life. This provokes in the structure of changed dispositions:

- 1) Avoidance reactions, as if the phenomenon of death does not concern a particular person or the belief that one's own death is imminent and already on the threshold (usually in these cases a person reduces or completely loses social contacts - the feeling of imminent death is experienced alone);
- 2) Restriction of the feeling of freedom;
- 3) Activation of the unconscious sense of guilt of the survivor (they are dead or suffering, and I am alive and relatively well) and the destructive sense of responsibility for it (such reactions often provoke the formation of self-destructive behavior);
- 4) Surprise the ceaselessness' of the terrorist attack is perceived as nonsense and often forces us to look for a pseudo-logical explanation for what happened. This is how social myths about the justice of terrorists' demands and the heroism of the perpetrators are created and spread.

In the course of hybrid wars, anti-terrorist operations, stressful media reports can provoke the development of mass specific victim manifestations: violation of social and personal identity, loss of meaning in life and social prospects, to form a complex of inferiority. On the one end growth of victim psychological transformations, in turn, can become a regulator of public sentiment, and thus contribute to changes in the further development of society. There are no victims without aggressors, on the other. The increase in the number of victimized people in society is unconscious due to certain forms of victim activity stereotypes and guidelines provoke violence and aggression not only by individuals, but also by social institutions.

Victimization can reach not only the general population but will also lead to the victimization of several generations in the future. This generalization of victimhood is associated with the spread of an unconscious scenario of behavior - the "ban on life". From generation to generation, such a scenario behavior unconsciously programs a person for discomfort and anticipation of disaster, that is, for the behavior of the victim. In these cases, there is an impoverishment of feelings associated with curiosity, positive experiences, and fear and anxiety become total, constant, although they have no objective basis. This makes it impossible to understand the reasons for one's own condition, and, therefore, does not allow to adequately respond in specific socially significant situations.

On the one end, frequent information about acts of violence can provoke antisocial and criminal behavior in the population. In people with underdeveloped reflection and inability to adequately assess and respond to current situations, induced behavior can be formed on the other end. Such behavior is associated with the exclusion from consciousness of some aspects of reality and exaggeration of certain personal problems. It activates internalized actions and spontaneous, impulsive decisions. If the sum of appropriated forms of behavior (degree of induction) exceeds a certain limit, they become a regulatory system of personal behavior. The degree of induction depends on the status of the person, the ability to meet needs, achieve goals (including prestigious), the lack of socially adapted ways to achieve.

The consequence of this kind of induction can be extreme manifestations of aggression, a tendency to sadistic behaviors, and the behavior of some lone terrorists. The psychological factors that contribute to the formation of induced behavior, the authors believe:

- 1) Self-doubt;
- 2) Difficult social circumstances;
- 3) Indifferent attitude of the environment.

## Conclusions

The victimhood of indirect witnesses to terrorist acts, both at the individual and at the group or mass levels, is a complex socio-psychological formation. The grounds for the formation of victimhood are the dispositional structure of internal regulation of behavior.

The most significant consequences of the psychological impact of terrorist acts on the media audience and the general population should be considered: the contradiction between the basic ideas of people and the reality published by the media, which is subjectively perceived as a threat to existence; subjective and objective unexpectedness of a terrorist act; the incorrigibility of the offense.

Psychological countermeasures should be based on the information component aimed at preventing inappropriate reactions, especially in the first days after the terrorist act, development and demonstration of optimal algorithms of behavior, prevent recourse to unconscious or subconscious impulses that violate basic illusions existence.

## References

- Hoffman, B. (2017). *Inside terrorism* (3<sup>rd</sup> Ed.). Columbia University Press. <http://cup.columbia.edu/book/inside-terrorism/9780231174770>
- Horgan, J. G. (2017). Psychology of terrorism: Introduction to the special issue. *American Psychologist*, 72(3), 199-204. <http://dx.doi.org/10.1037/amp0000148>
- Glad, K. A., Stensland, S., & Dyb, G. (2021). The terrorist attack on Utøya Island: Long-term impact on survivors' health and implications for policy. *Perspectives on Terrorism*, 15(3), 60-74. <https://www.universiteitleiden.nl/binaries/content/assets/customsites/perspectives-on-terrorism/2021/issue-3/glad-et-al.pdf>
- Smith, M., & Zeigler, S. M. (2017). Terrorism before and after 9/11 – a more dangerous world? *Research & Politics*, 4(4), 1-8. <https://doi.org/10.1177/2053168017739757>

Yılmaz, T. (2021). Victimology from clinical psychology perspective: Psychological assessment of victims and professionals working with victims. *Current Psychology*, 40, 1592–1600. <https://doi.org/10.1007/s12144-021-01433-z>

Received: *September 20, 2021*

Accepted: *December 05, 2021*

Cite as: Boltivets, S., & Okhremenko, O. (2021). Indirect witnesses of terrorist acts: Psychological consequences of intimidation. *Problems of Psychology in the 21<sup>st</sup> Century*, 15(2), 53-60. <https://doi.org/10.33225/ppc/21.15.53>

---

**Sergii Boltivets**  
(Corresponding author)

Doctor of Psychological Sciences, Professor, Head of the Department of Youth Policy Development, State Institute of Family and Youth Policy of Ukraine, Ukraine.  
E-mail: [boltivetssergij@i.ua](mailto:boltivetssergij@i.ua)  
ORCID: <https://orcid.org/0000-0003-4432-5272>

---

**Olga Okhremenko**

PhD, Professor, National Security Service Academy of Ukraine, Mykhaila Maksymovycha St, 22, 03022 Kyiv, Ukraine.  
E-mail: [oorkyiv@gmail.com](mailto:oorkyiv@gmail.com)  
ORCID: <https://orcid.org/0000-0003-4065-4976>

---