## The European Database of Terrorist Offenders (EDT): Development, Usability and Options

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## Abstract

The European Database of Terrorist offenders (EDT) is based on comprehensive judicial information of convicted or deceased terrorist offenders, including social, psychological and psychiatric reports. This new empirical database is the result of a European cross-border collaboration between judicial organizations and scientists within the European Union. The EDT dataset comprises developmental, individual, biographical and contextual factors, which are potentially related to engagement in violent extremism and terrorism. It supports research seeking to identify critical risk and protective factors for violent extremism and terrorism. The EDT dataset could be used to conduct studies aimed at the identification of significant personal and contextual risk and protective factors for terrorism and violent extremism, improving and validating risk assessments, as well as identifying pathways into terrorism and radicalization. Moreover, this data can assist in the design of effective policy, prevention and intervention practices regarding potential violent extremist and terrorist offenders in Europe and elsewhere. The aim of this article is twofold: firstly, it seeks to present the EDT, along with discussing its development and methodology. To this end, the inclusion criteria and coding principles are discussed, alongside quality-, privacy- and security issues associated with the gathering and processing of judicial data, together with some preliminary statistics. Secondly, it aims to discuss potentials for research based on EDT data. Accordingly, potential applications and future developments of the EDT are discussed as well as urgent needs to use and further develop this comprehensive and unique database.

**Keywords:** countering violent extremism, empirical validation, European database, extremism, profiling, protective factors, psychopathology, risk factors, terrorism

## Introduction

Since the terrorist attacks in New York, Paris, London, Brussels, as well as many other cities there has been an increased focus on countering violent extremism and terrorism. In 2020, there were again Islamist attacks in Europe as well as right-wing extremist terrorist acts. Empirical research was and is required to gain better insight into risk factors for terrorism, accompanied by methods for assessing and managing these risks. Despite the marked increase in research on terrorism in recent years, there remains a relative dearth of terrorist offender datasets based on reliable information that can be used to verify existing theories about risk factors for terrorism. [1] To address this problem and other related issues (including privacy), we developed the European Database of Terrorist offenders (EDT). The EDT contains information on the developmental, individual and contextual factors that may underlie people's engagement in violent extremism and terrorism. The data in the EDT could be used to support research, associated with shedding light on the personal and contextual risk and protective factors for terrorism and violent extremism, based on primary source information, as well as to understand the pathways into terrorism, i.e., the factors which contribute significantly to radicalization into violence. The outcomes of these studies could then subsequently inform policy makers' decision-making about key risk- and protective factors related to violent extremism and terrorism. In addition, the development of EDT fills a noted gap in research and application: it enables empirical analyses of personal and social/contextual risk factors and their interactions, using primary data. Extremism and terrorism research have lamented this data deficit for many years.[2]

Specific aspects distinguish the EDT from other existing databases. These are: (i) The EDT was created

through cooperation with several European Union (EU) Member States and aims to involve all EU Member States; (ii) EDT data can facilitate empirical quantitative research, subject to the regular criteria of objectivity and statistical validity as well as security; (iii) Once it comprises sufficient data, the EDT will be able to validate risk and protective factors for terrorist behavior and validate violent extremism risk assessment tools such as the VERA-2R; (iv) The EDT is in compliance with the strict privacy regulations of the EU.

The aim of this article is twofold, namely: to present the EDT and trace its development, and to delineate its potential for future empirical research and outline options for applied research and evidence-based policies. We begin by providing an overview of the database before proceeding to discuss its development and the organizations that were involved in its creation. Next, we outline the methodology, inclusion criteria, data collection process, coding principles and methods of measuring data quality. We then explain the privacy and security measures that were adopted to ensure that the EDT is compliant with security requirements and applicable legislation, followed by preliminary descriptive statistics. Finally, we evaluate the strengths and limitations of the EDT before concluding by providing avenues for future research and elucidating how the database can contribute to the field of terrorism and counterterrorism research.

## The European Database of Terrorist Offenders (EDT)

The EDT is a research database comprising information on European terrorist and violent extremist offenders who have been convicted from 2012 onward. The EDT also includes a control group of persons who have been convicted of violent offenses unrelated to terrorism or extremism. The coded EDT data consists of personal and contextual offender information, which derives from comprehensive judicial files of the participating EU Member States. A large number of potential risk factors, protective factors, and indicators for terrorism have been included, encompassing demographic data, childhood circumstances, trigger factors, ideologies, motives, mental health issues, and the nature of the terrorist offense and type of sentence. Moreover, information from forensic mental health assessments is included to provide insight into mental health issues. All qualitative information from judicial files is converted into quantitative codes prior to being entered into the database in order to enable quantitative analyses.

Both the design of the EDT and the European cooperation have important advantages. Firstly, primary data on terrorist offenders and their acts is generally only accessible to governmental organizations, thus condemning most academics to extrapolate data from studies in other fields and apply these insights to terrorism research. The cooperation between judicial organizations allows for access to comprehensive judicial files, including forensic mental health assessments, which hitherto have scarcely been used in the field of terrorism research. [3] The inclusion of information from normally unavailable judicial files, including forensic mental health assessments, affords a comprehensive overview of both the personal characteristics and the political and social context of the terrorist offender. Therefore, these files constitute valuable sources for the study into personal risk factors for terrorism, including psychopathology and contextual factors, which, despite the importance of examining them in combination with one another, have hitherto infrequently been studied together.[4]

Secondly, many EU Member States either have few cases of terrorist offenders in their country [5], and/or simply do not have the research capacity. This in turn hinders researchers' attempts to empirically investigate the risks and drivers for violent extremist engagement and terrorist action, as well as protective factors preventing persons from engaging in terrorist action. One major benefit of the cooperation between different EU Member States is the possibility of establishing a sufficiently large sample that allows for statistical and possibly inferential analyses.

Finally, a further notable strength of the EDT design is the inclusion of a control group, and the possibility to include multiple control groups. Extant knowledge of risk factors for terrorism is predominantly based on studies that lack a control group.[6] Although we cannot establish causal relations with the EDT dataset, the

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inclusion of a control group of violent offenders does mean that we can provide a stronger substantiation for those risk factors that are specifically associated with terrorism and violent extremism and potential overlapping characteristics with non-terrorist violent offenders. Additionally, the EDT comprises possible comparison groups (e.g., left, right, Islamism ideologies, male vs. female offenders, lone actors and groups). This allows for the analysis and comparison of risk and protective factors of engagement in terrorist and violent extremist offender groups.

#### Development and Organizations Involved

To generate scientific knowledge about personal and contextual risk and protective factors for terrorist and violent extremist offenders, the European Union funded DARE-project (Database and Assessment of Risk of violent Extremists) was established. The project launched in October 2017 in collaboration with research institutes and judicial organizations from several EU Member States.[7] The project group members are the Netherlands Institute of Forensic Psychiatry and Psychology (NIFP) as coordinator, the Institute for Interdisciplinary Research (IKG) at Bielefeld University, and the Belgium Prison organization. Decisions regarding the EDT are discussed in the project group, which has extensive experience in research and evaluation, as well as forensic professional diagnostic practice through close collaboration with law enforcement agencies, prisons and probation services. The benefits from this collaboration encompass three key areas: it increases the financial means, which results in greater coding capacity and allows for a larger research group; it enables a broader area of research to be examined; it provides a distinct intellectual advantage through cooperation and knowledge sharing. The long-term cooperation and ongoing process of data collection that underpins the EDT enables follow-up research into judicial interventions and post-conviction offender trajectories related to disengagement or recidivism.

## Definitions

Radicalization, terrorism and violent extremism are continually evolving concepts, which in part accounts for the heterogeneity of the available definitions.[8] In order to fully comprehend the meaning of the results of the prospective studies that will use the EDT data, it is above all important to know which definitions were used to obtain the data. Therefore, we will now discuss the definitions of key concepts that underpinned the data collection upon which the EDT is based. To clarify potential differences between the types of terrorist offenders across EU Member States, we will compare the types of violent extremist and terrorist offenses, group or single offenses, criminal codes, motives for the crime, and ideology, data of which were subsequently entered into the EDT.

#### Radicalization

Radicalization is often used to describe the process of adopting an extremist belief system that may result in the acceptance, legitimation and/or use of violence.[9] In accordance with both the Dutch Intelligence Service (AIVD) and the National Coordinator of Terrorism and Security (NCTV) we defined radicalization in the EDT as: "The active pursuit of and/or support for fundamental changes in society that may endanger the continued existence of the democratic order (aim), which may involve the use of undemocratic methods (means) that may harm the functioning of the democratic order (effect)."

#### Terrorism

There are many definitions of terrorism.[10] Terrorism can be driven by a range of (political, social, religious or other) ideologies or motivations, can take different forms and can be associated with different types of individuals and groups.[11] One unequivocal feature of terrorism is that it is always a premeditated act (rather than a brief period of anger or impulsivity). Although regularly assumed that for an act to be classified as a terrorist act, it must be driven by a political, social, religious or other ideologically based motivation, [12] this may not

always be the case.[13] For example, motivations can also be driven by monetary gain, status seeking, group belonging or excitement.[14] For the EDT, we followed the definition of the NCTV, which defines terrorism as: "the threat of, the preparation of, or the committing of, serious violence based on ideological motives against people, or deeds aimed at causing socially disruptive material damage with the goal to cause social change, to instil fear among the population or to influence political decision-making."[15] The decision to use this specific definition means that all types of terrorism are included in the EDT: jihadist and other religious-based forms of terrorism, as well as ethno-nationalistic, right-wing, left-wing and single-issue terrorism.

#### Violent Extremism

Violent extremism is often considered as unlawful violence in furtherance of a religious, political, social or other ideology.[16] It can be described as the beliefs and actions of people who either support or themselves use violence to achieve ideological, religious or political goals.[17] This is why the American FBI defines terrorism as "the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."[18] We took these definitions into account when developing the EDT, including the definition of the United States Agency for International Development (USAID), which defines violent extremism as: "advocating, engaging in, preparing, or otherwise supporting ideologically motivated or justified violence to further social, economic or political objectives."[19]

## Procedure

#### Cases

Currently, the EDT includes terrorist and violent extremist offenders from the Netherlands, Belgium, Germany, Austria and Sweden who were convicted from 2012 onward. The selection of cases was made by the judicial organization in each EU Member State. All kinds of terrorist and violent extremist deeds are included, such as, for example, jihadism and other religious-based forms of terrorism, as well as nationalistic, right- and left-wing, and single-issue terrorism. These cases also include convictions for *involvement* in terrorist acts, even in the absence of ideological motives of the offenders themselves. To avoid potential stigmatization, those persons who are indicted or suspected of terrorist or violent extremist crimes, but are not (yet) convicted, are not included.

The target group of ETD research consists of persons who have been convicted of a terrorist act. This also includes cases of violent extremist acts, if these fall under the Member State's terrorism legislation. However, terrorism legislation differs between countries. For example, right-wing extremists in Germany might not be convicted under existing terrorism legislation. Since our aim was to include all violent offenders acting on extremist and/or ideological views and motives within each EU Member State, a separate research group of violent extremists was added. This group consists of violent extremist offenders who have not been convicted of terrorism since their court files state that the offense is based on violent extremism. To this end, participating EU Member States are instructed to select convicted persons engaged in ideologically motivated crimes. Additionally, given that terrorist attackers frequently die during the course of their act, deceased terrorist attackers are included as a separate group to be researched. Even though these individuals can no longer be convicted, it is beyond dispute that they were involved in terrorism.

Due to the tremendous effort involved in entering a case into the database, during the two-year duration of the initial project only a limited number of cases could be entered. In May 2020 the EDT contained 194 cases of terrorist and violent extremist offenders, which included 168 convicted terrorist offenders, 16 convicted extremist offenders, and 10 deceased terrorist offenders. Given that convicted terrorist offenders are the main focus of the EDT, they took priority in the data entry process. As a result, convicted terrorist offenders are overrepresented in the current sample, compared to the separate group of violent extremist and deceased

terrorist offenders.

To enable the identification of risk and protective factors for violent extremism and terrorism rather than risk and protective factors for 'common violence', in each participating EU Member State, a control group of other violent offenders is selected. The control group is based on a random sample of violent offenders who were convicted for comparable but ultimately not extremist violent crimes, such as murder, manslaughter, crimes against public order or authority or violence against property or arson (see Table 1 for a list of all included types of crimes). The same information is included in the entries for the control group as for the other researched groups, e.g., demographic data, historical risk factors, trigger factors for committing a terrorist offense, indicators for terroristic acts, and psychopathology. The inclusion of a control group of violent offenders allows for gaining insights into the specific risk factors for terrorist and extremist deeds. The consequence of choosing this control group is that we are able to differentiate between ideologically- and nonideologically motivated violent offenders, but not to compare the violent and nonviolent extremists.

In light of the fact that data entry started with the inclusion of convicted terrorist offenders, by May 2020, merely 33 control group cases of violent offenders had been entered into the EDT. The original intention was to include as many control group cases as there were terrorist cases. This means that the majority of control group cases still have to be entered into the EDT. This is important because sufficient control group cases are required to be able to compare the two groups and conduct inferential analyses. However, the research is ongoing and in the coming years far more cases from both the research and control group will be entered.

In the future, a control group of nonviolent extremists can be added to the EDT, considering the following comparability issues. Firstly, a different setup is required to reach nonviolent extremists, because of the absence of judicial file information, making it necessary to gather their personal information in alternative ways, for example with interviews. Secondly, legal and mental health information is missing about nonviolent extremists.

Thirdly, it is always uncertain whether nonviolent extremists can truly be classified as nonviolent, for the simple fact that they often conceal it.

Type of violent crime *	Involvement violent (extremist/terrorist) crime			
1= Murder	1= Financing			
2= Manslaughter	2= Threatening			
3= Aggravated assault	3= Recruiting			
4= Aggravated robbery	4= Training			
5= Crime against public order/authority	5= Supporting			
6= Violence against property/arson	6= Unlawful possession of material			
7= War crime	7= Preparation			
8= Foreign military service	8= Member criminal organization			
9= Human trafficking	9= Member terrorist organization			
10= Kidnapping	10= Participating in activities terrorist			
11= Involvement violent crime	organization			
12= Involvement violent extremist/terrorist crime	11= Incitement			
88= Other violent crime	88= Other involvement			
* with or without terrorist or violent extremist intent				

#### Table 1: Typology Crime EDT

#### Data Collection

Until now, government agencies have formally granted access to the judicial documents for the case file research of violent extremists in participating EU Member States to one or two researchers in each Member State with the relevant expertise (see Table 2). The data are entered into the EDT in the Netherlands, Belgium, Germany, Austria and Sweden. The involved researchers have the necessary authorization and security clearance for processing the judicial data from their own Member State. Bielefeld University has permission to conduct research on the judicial files from the participating German States. The Federal Public Service Justice – Belgian Prison Service conducts research on the Belgian judicial files. NIFP researchers conduct the data collection of the Dutch judicial files. Furthermore, the Austrian Institute for International Affairs and the Swedish Prison and Probation Service collect relevant data in Austria and Sweden. The data entry takes place at the judicial organizations in which the judicial files are located. In the Netherlands these are located in the different districts of the Public Prosecution Service. The researchers plan to follow similar procedures for other Member States that wish to contribute in the future to this EDT research project.

#### Table 2: Requirements for Researchers Involved in Coding EDT Data

- Coders have successfully completed the NIFP coding training program. In this program experience is acquired with carrying out objective coding and knowledge of radicalization, violent extremism and terrorism
- Coders have signed an agreement for secrecy
- Coders have sufficient expertise in carrying out research in the field of criminal justice and/or psychology or criminology
- Coders hold a position at a government agency, security service, international agency, university or other research organization
- Coders understand the Codebook criterion definitions
- Coders must be familiar with the research into and operational knowledge of violent extremism and its accompanying characteristics

#### Data Sources

The information in the EDT originates from qualitative judicial files and includes data from the police, public prosecution, detention, forensic mental health assessment reports, and probation reports. With relatively few exceptions, the same information sources were available in each of the participating EU Member States (see Table 3). One advantage of using judicial files is the extensive legal and mental health information contained in them. This information allows for a comprehensive overview of the relationship between personal and contextual characteristics of violent (extremist) and terrorist offenders and their acts.

Information source	MS1	MS2	MS3	MS4	MS5
1= Police investigation/indictment	Х	X	x	х	х
2= Subject's history / development	х	х	х	х	х
3= Transcript of verdict (conviction and sentence)	х	х	х	х	х
4= Judicial history	Х	х	х	х	х
5= Psychiatric information and/or forensic report by psychiatrist	х	х	х	х	х
6= Psychological information and/or forensic report by psychologist	Х	х	х	х	х
7= Documentation subject / group concerning case		x	х	х	х
8= Documentation and/or a report of probation	х	х			х
9= Documentation and/or a report of prison	х	х	х	х	х
10= Documentation and/or a report of intelligence service	Х	х	х		х
88= Other source(s) of information*	х	х		х	

#### Table 3: Available Information Sources per Member State (MS)

\*Child protection board, Open sources, Protocols of the trial

#### EDT Codebook

To minimize systematic bias in data collection across the participating organizations, methods and procedures of information exchange and data coding were established. As part of this procedure, an English-language Codebook was developed. The Codebook contains explicit coding instructions about how items entered should be used and interpreted, in order to ensure that items are coded in a consistent and unambiguous manner. The descriptions of the items were developed by the NIFP in agreement with other members of the project group and the participating EU Member States. Expertise from several EU Member States was also utilized to further define the items. An independent advisory board of national and international experts in the field of terrorism was consulted in order to ensure that the content and methodology of the Codebook was sound. This advisory board also serves to minimize potential conflicts of interest.

#### DataSet

The EDT dataset includes items about the individual person, the context, the terrorist act, as well as information about the judicial interventions in each case. Overall, it consists of 16 domains and 379 items (see Table 4). These items are derived from a NIFP codebook on lone actors, which has been adapted to violent extremists and terrorists in exchange with other researchers [20], the VERA-2R manual and extant literature on violent extremism, terrorism and ordinary forms of violent crime.[21] Furthermore, a number of items are explorative in nature. For quality and follow-up purposes, a number of personal data fields were added, such as, for example, name, date of birth, and criminal reference number. The variables in the dataset consist of open text fields, dates, numbers or categories. The number of text fields was reduced as much as possible to minimize the identifiability of a person behind the data. Each item is accompanied by a description with the meaning of the item. For nominal or ordinal variables, category descriptions are also sometimes included (see Figures 1 and 2).

#### **Table 4: EDT Domains**

Domains	
1. Compilation Case File	9. Prior to Crime: Personal Acts
2. Demographic data	10. Preoccupation with Weapons
3. Crime & Conviction	11. Radicalization/Ideology
4. Criminal History	12. Beliefs & Attitudes (VERA-2R)
5. Personal History	13. Social Context & Intention (VERA-2R)
6. Personality Disorder and Traits	14. History, Action & Capacity (VERA-2R)
7. Psychiatric Disorder and Symptoms	15. Commitment & Motivation (VERA-2R)
8. Prior to Crime: Incidents	16. Protective & Risk Mitigation (VERA-2R)

Note: the number of items including personal encrypted data fields is 408.



#### Figure 1: EDT Data-Entry Page

Note: by clicking on the (i) button, the description appears below the item.

#### Figure 2: Extract of EDT Codebook

D	
Per	sonal History (PH)
•	<u>PH3 Has been rejected and/or bullied by others prior to crime</u>
	Variable Type: Ordinal
	Source: Target
	<u>Description</u> : Subject was rejected and/or bullied by others prior to crime. Rejected: not being accepted by others by being ignored,
	or being the only one not invited for a social event etc. Bullied: others repeatedly use force, threat, or coercion to abuse, intimidate
	or aggressively dominated the subject. This can be by verbal harassment or threat, physical assault or coercion. The bullying can
	be emotional, verbal, physical, and/or cyber if it took place on social media.
	Enter 2=Yes, Likely is perspective of the person. Enter 3=Yes, documented if confirmed by others or other information.
	0= No, documented
	1 = No, unlikely
	2=Yes, likely
	3 = Yes, documented
	-99= Information fails
	DLLC Subject mentioned discrimination
•	Verify The point of the second discrimination
	Same DADE
	Source: DARE
	Description: Specify aiscrimination subject mentionea (=perceivea by subject). Discrimination = Unjust or prejuacial treatment
	/ behavior on the grounds of ethnicity and nationality, age, sex or sexual identity, political opinion or belief, religion, disability or
	illness, civil or working status.
	0= No
	l= Yes
	-99= Information fails
Per	sonality disorder and traits (PT) (DSM 5)
Thi	s domain covers the personality disorder and traits or characteristics that are diagnosed by a psychiatrist or psychologist before,
dur	ing or after the crime.
	0 = No, documented: Personality disorder or traits of a personality disorder are not diagnosed or mentioned by psychiatrist
	or psychologist.
	1= No, unlikely: Personality disorder or traits of a personality disorder considered unlikely by psychiatrist or psychologist or
	other expert
	2= Yes likely: Personality disorder or traits of a personality disorder considered likely by psychiatrist or psychologist or other
	expert.
	3= Yes, documented Diagnosis of personality disorder or traits of a personality disorder by psychiatrist or psychologist.
	-99= Information fails: Personality disorder or traits of a personality disorder could not be diagnosed by typicatrist or
	psychologist or other expert. due to non-cooperation of subject or other reason
	r-y
•	PT1 Personality disorder and/or traits
	Variable Type: Ordinal
	Source: DARF_DSM5
	Description: Subject has a personality disorder: Paranoid - Schizoid - Schizotypical - Antisocial - Rorderline Histrionic
	Narcissistic _ Avoidant _ Dependent _ Obsessive_compulsive personality disorder and/or associated traits see appendix 1
	0- No documented
	1 – No, uplikaly
	1 = 100, unintery $2 = V_{00}$ likely
	2 = 1  cs, likely
	b = 1  es, accumented
	-99= Information fails

The first domain 'Compilation Case File' provides administrative information, such as the case file number, research group and the available sources of information. The second domain 'Demographic Data' describes the last-known situation prior to the terrorist crime being committed, such as education, relational status, living situation and socioeconomic status. In the third domain, termed 'Aspects Crime', various aspects of the terrorist 'index' crime are documented, including among other things, the type of crime, location, target, potential victims, weaponry used, involvement of other persons, as well as the subject's emotional state. Next, in the 'Criminal History' domain, both the number and types of prior crimes are documented, because prior violence is regarded as a strong predictor of future violence.[22]

The 'Personal History' domain includes items about victimization and trauma, work and school problems, and family situation during childhood including somatic illnesses or disabilities. Domains 6 'Personality Disorder and Traits' and 7 'Psychiatric Disorder and Symptoms' include information from forensic mental health assessments. The documented disorders and/or traits or symptoms are documented alongside information about the period in which these were present (prior, during and/or after the crime) and their potential relation to the crime.

Trigger factors for committing a terrorist offense, such as, for example, the loss of a loved one or the loss of employment are documented in domain 8 'Prior to Crime Incidents'. Domain 9 'Prior to Crime Personal Acts' includes various indicators for terroristic acts, such as self-isolation or a farewell letter. Domain 10 'Preoccupation with Weapons' registers if the person has a fascination for weapons, as well as specifying the precise nature of this interest, such as, for example, wearing firearms and/or idealizing the use of firearms. The radicalization period, which encompasses violent extremist contacts or networks and preoccupation with an extremist ideology, is documented in domain 11 'Radicalization/Ideology'.

Finally, domains 12–16 are derived from the VERA-2R risk assessment instrument for violent extremism. These domains not only outline risk- and motivational indicators but also several protective factors, due to the fact that the absence of protective factors has been found to be a significant predictor of violent outcomes, while also improving the accuracy of predictive models.[23] Protective factors could help to distinguish between those who are at lower or at a higher end within a risk group.[24] Protective factors include both individual characteristics such as a change in ideological values and a willingness to participate in programs against violent extremism, as well as external positive influences, such as receiving support from one's family or friends to disengage from extremist violence.

## Coding and Quality Control

Given that the information in the EDT is based on comprehensive qualitative reports, some items can sometimes not be found explicitly in the judicial files. To ensure that all the available and possibly relevant information is used, the categories 'No, unlikely' and 'Yes, likely' were added to the coding categories. These categories are used for information, which is not explicitly mentioned in the judicial file. For example, the item 'subject consumed alcohol before or during crime' should be coded as 'No, unlikely' in the event that the subject disapproved of alcohol consumption on the grounds of his or her religious beliefs. Or, to cite another example, the item 'Subject used weapons killing or wounding other(s) during crime' should be coded as 'Yes, likely' in the event that contextual judicial information on the case clearly indicated that weapon use was likely, e.g., in the case of a foreign fighter who went to Syria. For each item, a description is included in the database, along with definitions and illustrative examples of when to code 'Yes, likely' or 'No, unlikely'. Moreover, there are also coding rules for nonjudicial sources (e.g., information from the offender and his/her family). Researchers were instructed to code these sources with caution due to the possibility of either withholding information or providing socially desirable answers in police interviews. For this reason, 'Yes, likely' and 'No, unlikely' categories also must be used for nonjudicial information sources. This allows researchers to distinguish between those answers that are based on explicit and judicial information and those that are derived from contextual information and/or nonjudicial sources.

To provide the involved researchers with firsthand experience of objective coding, they participated in a two-day training course in which general coding instructions were provided (e.g., how to code as objectively as possible and be cognizant of the levels of credibility of various sources) as well as coding instructions, explanations of the meaning of specific items, in combination with illustrative examples. As part of the training, researchers independently coded all items of the codebook using five anonymized vignettes which were based on real terrorist cases. After the researchers finished these training cases, inter-rater reliability analyses were calculated based on the percentage of coding agreement between new researchers and the gold standard coding developed by the NIFP DARE team.

Since the distributions of the observed ratings frequently fell under one category of ratings, kappa estimates appeared to be unrepresentatively low.[25] Therefore, an alternative kappa was calculated, based on the percentage of agreement between the evaluators, and corrected for agreement based merely on chance, which depends on the number of answer options available. To establish the strength of the agreement, Landis & Koch's cutoff points were used.[26] Prior to the actual data entry an agreement of .7, which corresponds with a substantial kappa, had to be reached for each of the items.

For items with a lower percentage of agreement, additional coding instructions were sent to the researchers prior to entering the real terrorist cases. Moreover, researchers were instructed to clarify their answers in the database for each of these items. These explanations were evaluated by the NIFP DARE team to ensure that items were coded correctly in light of the available contextual information. If wrong interpretations were made, the researcher was approached and invited to change his or her coding if necessary.

#### Security and Privacy

The EDT was developed and is hosted by an external independent and certified Dutch IT organization. The inclusion of personal data allows for longitudinal research, in which follow-up trajectories can be linked to those subjects already entered in the database. Therefore, the database is designed to be adapted and expanded, so that researchers of the team can continue to collect data and develop new data fields. Having introduced some key features of the EDT, we now turn to a description of the current descriptive statistics of the EDT data.

Since the EDT contains personal data and mental health information, which is collected in the judicial domain and, hence, not readily available to outside researchers, it is of great importance to protect this data as much as possible. Processing personal data and, in particular, information about individual mental and physical health places these individuals at significant risk in terms of the potential harm caused by either a data breach or the abuse or misuse of their personal information.

To protect the personal data included in the EDT, we ensured that the database both meets the security requirements for IT services set by the Dutch government and complies with the new European privacy legislation, including the General Data Protection Regulation (GDPR). The number of text fields was reduced as much as possible to minimize the identifiability of the individual person behind the data. Access to the database is strictly limited to those researchers involved in the project, and, even then, researchers only have direct insight into the date which they entered themselves. Prior to data entry, a confidentiality statement was signed by the participating organizations and researchers.

Based on the European GDPR, one of the safety measures employed in this project is the encryption of personal data by a Trusted Third Party. This means that personal data fields are not accessible or visible after having been entered. The database information can only be updated by means of a two-way encryption procedure, which allows the pseudonymized personal data to be decrypted from the database to request new (case) information about the concerned data subject if required. The NIFP project administrator periodically checks all entries for the purposes of monitoring the quality of the data based on distributions, outliers, inconsistencies, missing values and logical errors.

In order to assess the extent to which the data processing is compliant with GDPR and the EU Directive 2016/680, a Privacy Impact Assessment (PIA) was carried out before the data entry started. The document was discussed by a committee of Dutch privacy and security advisors and presented to the Data Protection Officer of the Dutch Ministry of Security and Justice. Furthermore, a risk analysis was carried out by the Dutch National Coordinator for Security and Counter Terrorism (NCTV), who concluded that the study design posed no disproportionate risks to the privacy of the subjects.

## **Descriptive Statistics**

Given that the number of cases and variables included in the EDT is continually expanding, preliminary statistics are provided here only for the group that was available in the EDT at the time of the data analyses. Once enough control group cases are entered to allow for statistical analyses, comparisons will in the future be made between the research's principal target group and the control group. If, in the future, other control groups are included, then comparisons with these groups can also be made and additional research questions can be answered.

#### Characteristics of the Main Group Researched

Table 5 shows some basic characteristics of the research's target group of terrorist offenders. A large majority of the offenders are male (91%) with a mean age of 27 years (SD=7). The youngest offender is 15 years old, while the oldest is 60 years old. Almost 3 out of 4 offenders are either first- or second-generation migrants. Ninety percent of the offenders are adherents of Islam.

Outcomes related to education are derived from the International Standard Classification of Education (ISCED). Almost half of the group is educated only to a lower primary school or middle school level (41%), while the other half is educated to an upper secondary or higher education level (47%), with information on 12% of the cases missing. At least half of the terrorist offenders did not finish their education. Prior to the terrorist crime, more than a third of the offenders were unemployed. Furthermore, the results show that just over half of the group (52%) had a prior criminal conviction.

The most often committed index crime is 'participating in activities of a terrorist organization' (35%), followed by 'membership of a terrorist organization' (25%). The next most prevalent crime categories are preparation, financing, training, supporting, and murder. The majority of the offenders committed the terrorist act alongside other offenders (68%).

In addition to these demographics, the EDT data also focus on examined psychopathology and a number of psychosocial factors as potential risk factors for terrorism. Results regarding these risk factors will be published in a separate article.

Since the main focus of the EDT is on convicted terrorist offenders rather than violent extremists, a majority of jihadists is included. This could explain the current overrepresentation of members of the Islamic religion and first- or second-generation migrants. This also applies to the results regarding the characteristics of the terrorist act. While jihadi attacks are mostly organised by terrorist groups and networks, far-right extremist acts are relatively often carried out by gangs, lone actors and unorganized perpetrators.[27] Therefore, in the current sample convictions for membership of and participation in a terrorist organization may be overrepresented. More importantly, the EDT is meant to grow continuously and an effort is made to include all types of extremists. After the inclusion of more cases of violent extremists with left- and right-wing ideologies, background characteristics may alter with respect to age, gender or socioeconomic factors.

		Ν	%
Gender	Male	176	90.7
	Female	16	8.2
	Missing	2	1.0
Age	<= 17	7	3.6
	18-21	41	21.1
	22-25	37	19.1
	26-29	46	23.7
	30-39	33	17.0
	>=40	11	5.7
	Missing	19	9.8
Migrant	No	37	19.1
	Yes. subject	77	39.7
	Yes. one or both (grand) parents	67	34.5
	Missing	13	6.7
Religion	No religion	5	2.6
	Islamic	174	89.7
	Other (Christianity/other East-Asian region)	2	1.0
	Missing	13	6.7
Highest education	Primary or lower secondary education	79	40.7
2	Upper secondary or higher education	92	47.4
	Missing	23	11.9
Subject finished school	No	100	51.5
-	Yes	70	36.1
	Missing	24	12.4
Occupation	Unemployed	71	36.6
	Student	24	12.4
	Work	70	36.1
	Incapacitated	2	1.0
	Other	3	1.5
	Missing	24	12.4
Former crimes	No	75	38.7
	Yes	116	59.8
	Missing	3	1.5
Former conviction	No	89	45.9
	Yes	100	51.5
	Missing	5	2.6
Most occurrent terrorist crime(s)	Participating in activities terrorist organization	67	34.5
	Member terrorist organization	49	25.3
	Preparation	26	13.4
	Financing	22	11.3
	Supporting	21	10.8
	Murder	20	10.3
	Recruiting	17	8.8
	Incitement	16	8.2
	Threatening	14	7.2
	Training	10	5.2
Involvement other persons in	No	51	26.3
crime(s)	Yes	132	68
	Missing	11	5.7
Total	-	194	100

# Table 5: Socio-Demographic Characteristics of 194 Terrorist Offenders Convictedin Different European Member States Between 2012 and 2020

Note: Since persons can be involved in more than one terrorist crime. the frequencies of the most occurrent terrorist crime(s) add up to 262 in total.

#### Missing Values

As one can discern from Table 3, the judicial cases in each of the participating EU Member States derive from different information sources. The original information in the main sources was gathered in a prosecutorial context, as opposed to information collected for scientific purposes. Consequently, items in the EDT which are of lesser relevance for criminal trials have a higher percentage of missing information.

Table 6 shows the average number of missing values for items within each domain, together with the minimum and maximum percentage of missing values. For all 379 items, the average percentage of missing values is 16%. Items in domain 9: 'Prior to Crime Personal Acts' contain the highest percentage of missing values (27%), followed by the domains 'Personal History' (25%), 'Protective and Risk Mitigation' (25%), and 'Preoccupation with Weapons' (24%). The items with the most missing values (67% or more) originate from the 'Personal History' domain. These items are all related to parenting (e.g., 'Parent did not have clear rules about how subject should behave' or 'Parents were not emotionally supportive').

Domain	% Missing	Min	Max	Nr items
1. Compilation Case File	0	0	0	2
2. Demographic data	17	0	59	43
3. Crime & Conviction	5	0	42	82
4. Criminal History	3	0	16	8
5. Personal History	25	0	77	47
6. Personality Disorder and Traits	15	0	55	29
7. Psychiatric Disorder and Symptoms	21	0	54	37
8. Prior to Crime: Incidents	19	0	53	10
9. Prior to Crime: Personal Acts	27	0	68	12
10. Preoccupation with Weapons	24	1	48	2
11. Radicalization/Ideology	17	0	40	15
12. Beliefs & Attitudes (VERA-2R)	20	2	52	16
13. Social Context & Intention (VERA-2R)	17	0	47	22
14. History, Action & Capacity (VERA-2R)	17	2	40	11
15. Commitment & Motivation (VERA-2R)	20	0	47	18
16. Protective & Risk Mitigation (VERA-2R)	25	0	67	25
Total	16	0	77	379

#### Table 6: Average Percentage of Missing Values in Items per EDT Domain

Note: the number of items including personal encrypted data fields is 408.

#### Data-Sharing Principles

The key issue with many governmental data is their limited availability to academic researchers. This applies, in part, to the EDT dataset, insofar as the judicial information sources cited in the database are not publicly available in the participating EU Member States. However, after completing the necessary data quality checks, anonymized datasets comprising a selection of items can be made available for the purposes of publication, replication or validation. One condition for external publication is that at least one of the EDT partners participates in the study and is a coauthor. Additional conditions for data sharing are described in an EDT data-processing agreement.

The starting point for sharing EDT data is compliance with European privacy regulations, which state that personal data may be collected for specified, explicit and legitimate purposes and may not be further processed

in a manner that is incompatible with those purposes. Furthermore, according to these principles, the dataset has to be relevant and limited to the purposes for which it was originally processed.

To comply with the privacy regulations, data requests will be assessed based on their societal, scientific, or policy relevance. Only a selection of the EDT dataset will be shared, depending on the specific research goals and subsequent approval of the EDT project board. In the case of data transfer, the receiving party must complete and sign a data-sharing form comprising an overview of the purpose of the research and intended usage of the received data, alongside security safeguards. Additionally, the external party must sign a nondisclosure agreement. Thus, in time, data from the EDT could be shared with researchers or other stakeholders, such as judicial organizations, provided they adhere to the aforesaid privacy and security guidelines.

## Discussion

While terrorism research is increasingly based on primary sources, the use of databases remains relatively low, with few collaborations between researchers and a relative dearth of studies based on clinical assessment. [28] To address these issues, the EDT was developed. It has a number of strengths. The first strength is that we were able to access judicial information that is ordinarily not available to researchers due to privacy issues. The database comprises a European cross-border collaboration between scholars and governmental judicial organizations which grants participating researchers access to comprehensive judicial sources. These sources provide insight into a large number of personal and contextual risk factors for engagement in terrorism across national boundaries. Although biases in judicial file information cannot be ruled out, one benefit compared to open source information is that judicial information is verified and, in turn, less influenced by biases.[29]

A second strength of the EDT is the inclusion of a large number of both contextual and personal data, including, among other things, mental health information. By analysing these data, studies can meet the desire to empirically validate existing theories of risk factors for terrorism, as well as analyze the role of psychopathology, based on reliable mental health data, while simultaneously taking into account situational and contextual risk factors.[30]

A third strength of the EDT is its design and methodology. To facilitate objective coding by a wide range of European researchers, we developed a codebook and training program and we evaluated the objectivity of the data with inter-rater reliability analyses. Furthermore, due to the inclusion of a control group of violent offenders, it is possible to distinguish between risk and protective factors for violence and risk and protective factors for violent extremist deeds. A next important step could be to shed light on the risk factors for terrorism that are not present and protective factors that are present amongst extremists who do not engage in violent behavior.[31] This requires clarification of what information can be compared.

A fourth strength of the EDT is the security and privacy by design, including the encryption of personal data by a 'Trusted Third Party'. The risk of individual data subjects being identified is decreased by analysing terrorist cases at an international level, which also enables us to disclose information for research that would otherwise not be available. This combination serves to make the EDT a secure storage location for the personal data of terrorist offenders. Thereby, any subsequent sharing of this important knowledge will not be hampered by privacy issues, insofar as EDT data-sharing procedures allow for sharing anonymized subsets under strict privacy and security conditions.

## Challenges, Limitations, Options and Needs

#### Methodological Issues

While, on the one hand, the large number of items in the EDT dataset enables the validation of a wide range of assumed risk factors for terrorism, on the other hand, the size of the dataset also has some negative consequences. Firstly, the large number of items makes the coding process complex and time consuming. Approximately one day is needed to enter a single terrorist case into the EDT. Consequently, it takes considerable time to

enter enough cases to be able to conduct inferential analyses. Therefore, more EU Member States will have to participate in the EDT to increase the size of the research group.

Secondly, in the event that an offender denies any involvement in a crime and refuses to take part in a mental health investigation, this results in incomplete information. Additionally, the large number of items and various formats and contents of European judicial files further increases the number of missing values. For example, the 'Personal History' domain appeared to have a relatively large number of missing values, which may suggest that information in this domain was not deemed to be necessary for the prosecution. However, coding of most of the items could still be completed using all the available judicial information including forensic mental health reports.

Thirdly, the large number of researchers from different participating EU Member States, who have different research backgrounds, makes it difficult to consistently interpret items. Combined with the large number of items, it was hard for researchers to reach a sufficient inter-rater reliability for all items, resulting in items with low inter-rater reliability. To deal with this issue, items measuring the same construct could be analysed together. For example, 'victimhood' is a construct that relates to risk factors in items measuring victim of violence, misrecognition, or discrimination.

To improve the inter-rater reliability, we aim to develop a revised version of the codebook with additional descriptions of items, based on insights gathered in the past four years. Nevertheless, it will be nearly impossible to achieve complete agreement, because it is simply unfeasible to develop all-encompassing descriptions for every single situation. Therefore, to prevent too much missing data, we propose steering a middle course between using contextual information and striving to avoid coding differences stemming from subjective interpretations by the coders.

#### Financial Issues

To maintain a European Database is time consuming and costly, and, indeed, several databases previously were discontinued, in part due to a lack of funding.[32] As aforesaid, more cases from different EU Member States have to be entered over the course of the next years in order to be able to conduct meaningful inferential analyses. In this respect, perhaps the biggest challenge concerns continuing to find financial resources so as to be able to host and maintain the EDT and enter more cases. The Dutch NCTV and Dutch ministry of Security and Justice currently fund the EDT, and might continue to do so for the coming years. The NIFP and partners have an open policy when it comes to collaborating with more EU Member States in the near future. Notwithstanding our current funding situation, new requests are being made for European and national funding, and one European funding has recently been granted. The EDT requires both a long-term perspective and continued cooperation between partners, participants and funders.

#### **Future Research Directions**

The EDT is designed to support longitudinal research, which makes it both expedient over a longer period of time and flexible to adapt, depending on the actual research interests of EU Member States. By spring 2021, almost 250 cases from five EU countries have been entered in the EDT. We will continue to enter data for at least 850 convicted European terrorist and violent extremist offenders, as well as a matching number of convicted violent offenders for the control group. This data will open up several future research directions. Here, we present the main research directions that can be studied using data from the EDT. Depending on the needs and priorities of academia, judicial organizations and national and European Justice organizations, other research directions will also be explored.

#### Identification of Critical Risk and Protective Factors for Terrorism

When enough control group cases of violent offenders have been entered into the EDT to enable statistical analyses, it will be possible to examine whether the assumed risk and protective factors for terrorism are able to distinguish between extremist violence and ordinary violence. Although the EDT dataset is not able to establish

causal relations with any degree of certainty, it can empirically show the presence or absence of specific risk and protective factors.

#### Group Comparisons

Comparisons between different terrorist offender groups can be analysed. Offender groups in the EDT differ regarding their ideology (e.g., left, right, Islamist, ethno-nationalist, idiosyncratic individual causes), membership to groups (lone actor versus group member; leaders versus followers), age or gender. Analysis can focus on the comparison of risk and protective factors for engagement in terrorist and violent extremist offenses between these different offender groups. Such comparisons and insights are much needed.[33]

#### Risk Patterns

Interactions between risk factors can be examined, which in turn can lead to the identification of subgroups characterized by specific 'risk patterns': clusters of risk factors, related to subgroups of the terrorist offender group, since each subgroup can possibly be defined by a specific combination of risk factors. For example, striving toward a sense of group belonging combined with problems with existing relationships may only represent risk factors for younger groups of terrorist offenders. Another distinction in terms of risk patterns can be made with respect to the type of terrorist crime committed and the role of the offender in the terrorist group. Traditionally, terrorism research focused on terrorist attacks, leaving intragroup differences largely understudied.[34] However, besides executing acts of violence, engagement in terrorism encompasses a wide spectrum of terrorist behavior, such as, for example, involvement in the preparation, financing or recruitment of terrorist activities—behaviors which are changing and developing over time. To effectively assess the risk of (and therefore manage) individuals involved in terrorism, it is important to have clarity over the type of risk that is being assessed. Therefore, one important research direction will be to distinguish between the various risk patterns that may be related to different types of terrorist crimes and to distinguish significant from nonsignificant factors on an empirical basis.

#### Terrorism Pathways

The EDT dataset allows for the examination of global pathways of risk factors related to childhood circumstances, the period of radicalization, as well as the year prior to the criminal act. Although the EDT variables cannot define specific *linear* pathways to terrorism nor identify causal relationships, they can nevertheless be arranged and linked together in order to identify potential paths that lead an individual to committing an act of terrorism. This allows us to gain better insights into the importance of different biographical and socialization risk factors at different periods of a person's life cycle. These can include risk factors in childhood, such as violence in the family, risk factors in the very sensitive adolescent period and/or in the year prior to the crime, like losing a job or a loved one, and factors related to the radicalization phase, such as self-isolation from friends and family and becoming preoccupied with a violent ideology. Therefore, with the large number of historical risk factors occurring at different periods of a person's life cycle, different stages of progression toward extremist violence can be explored.

Although it may be possible to find indications of potential critical (clusters of) risk factors for offenders or offender groups with EDT data, it is not possible to control for all possible influences persons face in their life spans, [35] leading to individual, cultural and situational sources of variance in statistical analyses. This being noted, the risk and protective factors identified here could well serve to support models for (pathways to) terrorist engagement, approaching real life as an important step for a better understanding of the important issues our EDT focuses on.

#### Terrorism and Role Psychopathology

One line of research the EDT can provide is the potential role of psychopathology in committing terrorist crimes, in association with meaningful environmental risk factors. Several scholars have underlined the importance of examining the relationship between psychopathology and terrorism, in conjunction with personal, social and contextual circumstances.[36] With this in mind, the EDT dataset can be used to examine psychopathology

as potential risk factor for engagement in terrorism, considering contextual risk factors. This could not only involve research into mental disorders, but also the diagnosis of underlying traits or symptoms that lack an specific mental disorder diagnosis. It is important to take these traits and symptoms into account, also because a differentiated psychopathological approach is considered best practice for forensic experts.

#### Validation of Risk Assessments for Terrorism

Another line of research possible with the EDT dataset is to validate risk assessment instruments like the Violent Extremist Risk Assessment instrument (VERA-2R), which is used all over the world.[37] This structured professional violent extremism judgment tool was originally developed to achieve a more focused form of violent extremism risk management.[38] The instrument is based on professional and theoretical knowledge about risk factors for violent extremism. However, further scientific research is needed to evaluate and validate the risk factors for violent extremism in order to subsequently improve the ability of the VERA-2R to assess and manage the risks for violent extremism. Given that all of the VERA-2R indicators are included in the EDT as separate items, the relative importance of each indicator can be examined. By acquiring additional insight into the risk patterns of terrorist subgroups, risk assessments can be made more accurate for specific subgroups.

#### Effectiveness Judicial Interventions for Terrorist Offenders

Finally, the EDT data could be used to study the effectiveness of interventions targeted at terrorist offender groups, based on specific data related to the intervention, such as the duration and focus of the intervention and future recidivism data. This is of importance for evidence-based risk prioritization, risk targeting, and risk-based rehabilitation of terrorist offenders.

## **Policy Implications**

The EDT dataset can be used for high-quality quantitative research, which can directly inform policy makers' decisions vis-à-vis key personal and contextual risk and protective factors for terrorism.[39] The longitudinal design makes it possible to develop a European terrorist monitor for policy purposes, such as monitoring of prevention and intervention programs. The continuation of the EDT as a monitoring instrument in coming years would enable the development of an expertise hub, as well as education and training programs, which, in turn, could bridge knowledge gaps between researchers, policy makers and practitioners in the field of countering terrorism and violent extremism. Providing insights into the key personal and contextual risk and protective factors for terrorism can serve several policy purposes.

Knowledge from the EDT could be used to empirically substantiate and validate violent extremism risk assessments, such as the VERA-2R. Output from the EDT could also enhance extant understanding of the distinct risks for various types of offenders and types of terrorist involvement. In so doing, this could support judicial organizations to make informed decisions regarding risk assessment, treatment and management.[40] Moreover, the identification of subgroups with different risk patterns could help to make interventions and risk-assessment tools, such as the VERA-2R, more tailored and based on individual needs, risks and responsiveness, thereby improving the overall effectiveness of such instruments and interventions. Furthermore, insight into the role played by psychopathology in relation to terrorist activities, including the presence of traits or symptoms of a mental disorder, could have added value for forensic mental health assessments, where a differentiated psychopathological approach combined with risk management is considered best practice.

Although the EDT data can help professionals to map the possible risks posed by a person, individual circumstances could elevate or strengthen certain risk factors. Therefore, the ultimate weighting of the unique specific personal and contextual circumstances ought to be done by professionals in their structured violent extremism risk assessments.

The long-term design of the EDT makes it possible to investigate the effectiveness of interventions by measuring recidivism rates and other outcome measures, such as, for example, disengagement and/or the psychosocial functioning of a terrorist offender. This knowledge will take on even greater importance in the coming years,

as convicted terrorist offenders begin to be released from prisons in several European countries.

However, the knowledge to be gained from utilizing the EDT in future research does not only have relevance in a forensic setting. Rather, given that a large part of the codebook deals with personal history items, negative life events and personal experiences prior to committing the crime that brought the individual in contact with the criminal justice system, this information also has relevance outside a correctional setting. For example, parents, teachers, neighborhood watches, youth centers, mosques, municipalities, or police officers could benefit from information derived from the EDT. Depending on the specific setting, the relevant information could be observed, questioned, verified or monitored. For example, if the combination of early school dropout and experiencing violence within the family situation appear to be precursors for radicalization into terrorism, then this information could be used to develop or refine early interventions, such as parenting programs or prevention programs to reduce school drop-out rates.

#### Conclusion

Although the methodological designs of terrorism research have improved markedly in recent years, to the best of our knowledge the EDT constitutes the first European offender-focused database with a control group, which is based on primary data from judicial sources. The data included in the EDT enable research on key personal risk and protective factors for violent extremism and terrorism. Consequently, the results from research utilizing the data in the EDT will be of critical relevance for security organizations and policy makers alike, insofar as it will provide them with more reliable risk assessments and risk management instruments for terrorist offenders, including much-needed information on the effectiveness of judicial interventions for this offender group.

#### Acknowledgements

We would like to thank the researchers of all participating EU Member States, both for their valuable contribution and commitment to the development of the EDT and for inputting the judicial cases. We would like to extend a special thank you to Astrid Boelaert from the Belgium Prison organization for involvement in the DARE project group and the development of the EDT.

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#### Notes

- Schuurman, B. (2020). Research on Terrorism, 2007–2016: A Review of Data, Methods, and Authorship. *Terrorism and Political Violence*, 32(5), pp. 1011–1026. DOI: 10.1080/09546553.2018.1439023.
- [2] Pisoiu, D., Zick, A., Srowig, F., Roth, V. & Seewald, K. (2020). Factors of Individual Radicalization into Extremism, Violence and Terror – the German Contribution in a Context, *International Journal of Conflict and Violence*, 14(2), 1–12. DOI: 10.4119/ijcv-3803.
- [3] Schuurman, B. (2019) Topics in Terrorism Research: Reviewing Trends and Gaps, 2007–2016, *Critical Studies on Terrorism*, 12(3), 463–480. DOI: 10.1080/17539153.2019.1579777; Horgan, J. & Boyle, M. J. (2008). A Case against 'Critical Terrorism Studies'. *Critical Studies on Terrorism*, 1(1), 51–64. DOI: 10.1080/17539150701848225.
- [4] Monahan, J. (2012). The Individual Risk Assessment of Terrorism. *Psychology, Public Policy, and Law, 18*(2), 167–205. DOI: 10.1037/a0025792; Horgan, J. G. (2017). Psychology of Terrorism: Introduction to the special issue. *American Psychologist, 72*(3), 199–204. URL: <u>https://doi.org/10.1037/amp0000148</u>; Lloyd, M. & Dean, C. (2015). The development of structured guidelines for assessing risk in extremist offenders. *Journal of Threat Assessment and Management, 2*(1), 40–52. URL: <u>http://dx.doi.org/10.1037/tam0000035</u>; Desmarais, S. L., Simons-Rudolph, J., Brugh, C., Schilling, E. & Hoggan, C. (2017). The state of scientific knowledge regarding factors associated with terrorism. *Journal of Threat Assessment and Management, 4*(4), 180–209. URL: <u>http://doi.org/10.1037/tam0000090.</u>
- [5] European Union (2020). European Union Terrorism Situation and Trend Report (Te-Sat) 2020. URL: <u>https://www.europol.</u> <u>europa.eu/activities-services/main-reports/</u>.
- [6] Desmarais, S. L., Simons-Rudolph, J., Brugh, C., Schilling, E. & Hoggan, C. (2017). The state of scientific knowledge regarding factors associated with terrorism. *Journal of Threat Assessment and Management*, 4(4), 180–209. URL: <u>http://doi.org/10.1037/tam0000090</u>; Bowie, N. G. (2017). Terrorism Events Data: An Inventory of Databases and Datasets, 1968–2017. *Perspectives on Terrorism*, *11(4)*, 50–72. URL: <u>https://doi.org/10.1080/10576100802339185</u>; Bowie, N. G. (2020). A New Inventory of 30 Terrorism Databases and Datasets. *Perspectives on Terrorism*, *14*(1), 54–66. URL: <u>https://doi.org/10.1080/10576100802339185</u>; Schuurman, B. (2020). Research on Terrorism, 2007–2016: A Review of Data, Methods, and Authorship. *Terrorism and Political Violence*, *32*(5), pp. 1011–1026. DOI: 10.1080/09546553.2018.1439023.
- [7] The Netherlands Institute of Forensic Psychiatry and Psychology (NIFP) coordinates and leads the research that started in the EU-funded DARE project (Database and Assessment of Risk of Violent Extremists) together with the Institute for Interdisciplinary Research on Conflict and Violence (IKG) of the University of Bielefeld, and the Psychosocial Service of the Belgium Penitentiary Institutions. The prison services of different German Member States, the Austrian Prison Service and the Swedish Prison and Probation Service also participate.
- [8] Schmid, A. P. (2013). *Radicalisation, De-Radicalisation, Counter-Radicalisation: A Conceptual Discussion and Literature Review.* The Hague: ICCT.
- [9] Moghaddam, F. M. (2005). The Staircase to Terrorism: A psychological Explanation. American Psychologist, 60(2), 161-169;

Precht, T. (2007). *Home Grown Terrorism and Islamist Radicalization in Europe: From Conversion to Terrorism*. Copenhagen, Denmark: Danish Ministry of Justice; Silber, M.D. & Bhatt, A. (2007). *Radicalization in the West: The Homegrown Threat*. New York: New York City Police Department, Intelligence Division. URL: <u>http://www.nypdshield.org/public/SiteFiles/documents/</u><u>NYPD\_Report Radicalization\_in\_the\_West.pdf</u>.

- [10] Schmid, A. P. 2020. Revisiting the Wicked Problem of Defining Terrorism. Terrorism: Its Past, Present & Future Study A Special Issue to Commemorate CSTPV at 25, 3–11. URL: <u>https://cvir.st-andrews.ac.uk/articles/10.15664/jtr.1601/</u>.
- [11] Pressman, D. E., Duits, N., Rinne, T. & Flockton, J. S. (2018). Violent Extremism Risk Assessment Version 2 Revised. A structured professional judgment approach. Utrecht: NIFP.
- [12] Ibid.
- [13] Horgan, J. & Taylor, M. (2011). Disengagement, de-radicalization and the arc of terrorism: Future directions for research. In: Rik Coolsaet (Ed.) *Jihadi Terrorism and the Radicalisation Challenge: European and American Experiences*, Farnham: Ashgate, p. 174.
- [14] Pressman, D. E., Duits, N., Rinne, T. & Flockton, J. S. (2018). Violent Extremism Risk Assessment Version 2 Revised. A structured professional judgment approach. Utrecht: NIFP.
- [15] NCTV (2016). *National Counterterrorism Strategy for 2016–2020*. The Hague: NCTV. URL: <u>https://english.nctv.nl/themes/</u> <u>counterterrorism/documents</u>
- [16] Pressman, D. E., Duits, N., Rinne, T. & Flockton, J. S. (2018). *Violent Extremism Risk Assessment Version 2 Revised. A structured professional judgment approach.* Utrecht: NIFP.
- [17] Striegher, J. L. (2015). Violent-extremism: An examination of a definitional dilemma. Australian Security and Intelligence Conference, 2015, 75–86. URL: <u>https://doi.org/10.4225/75/57a945ddd3352</u>.
- [18] FBI (2011). Federal Bureau of Investigation. *Counterterrorism Analytical Lexicon*. US Department of Justice. URL: <u>http://</u> <u>cryptome.org/fbi-ct-lexicon.pdf</u>.
- [19] USAID (2011). The Development Response to Violent Extremism and Insurgency. URL: <u>https://www.usaid.gov/sites/default/files/documents/1870/VEI\_Policy\_Final.pdf</u>
- [20] NIFP (2013), *Codebook lone actors*; German Bielefeld/NIFP (2015) *Codebook on Radicalization* 2015; Paul Gill (2015), *Codebook on Lone Actors*; PIRUS Codebook (2017) (Profiles Individual Radicalization in United States).
- [21] Lone actor and group-based terrorism (Alderdice, J. T. (2007). The individual, the group and the psychology of terrorism. International Review of Psychiatry, 19(3), 201-209; Schuurman, B. & Horgan, J. G. (2016). Rationales for terrorist violence in homegrown jihadist groups: A case study from the Netherlands. Aggression and Violent Behavior, 27, 55-63); The role of psychopathology (Corner, E. & Gill, P. (2018). The nascent empirical literature on psychopathology and terrorism. World psychiatry: official journal of the World Psychiatric Association (WPA), 17(2), 147–148. URL: https://doi.org/10.1002/wps.20547; Gill, P. & Corner, E. (2017). There and back again: The study of mental disorder and terrorist involvement. American Psychologist, 72(3), 231–241. DOI: 10.1037/amp0000090.); Radicalisation principles (McCauley, C. & Moskalenko, S. (2017). Understanding Political Radicalization: The Two-Pyramids Model. American Psychologist, 72(3), 205–216. DOI: 10.1037/ amp0000062; Vergani, M., Iqbal, M., Ilbahar, E. & Barton, G. (2020). The Three Ps of Radicalization: Push, Pull and Personal. A Systematic Scoping Review of the Scientific Evidence about Radicalization Into Violent Extremism. Studies in Conflict & Terrorism, 43(10), 854. URL: https://doi.org/10.1080/1057610X.2018.1505686); The role of social media (Gill, P., Corner, E., Conway, M., Thornton, A., Bloom, M. & Horgan, J. (2017). Terrorist Use of the Internet by the Numbers: Quantifying Behaviors, Patterns, and Processes. Criminology & Public Policy, 16(1): 99-117. URL: https://doi.org/10.1111/1745-9133.12249; Schuurman, B. & Horgan, J. G. (2016). Rationales for terrorist violence in homegrown jihadist groups: A case study from the Netherlands. Aggression and Violent Behavior, 27, 55-63. URL: https://doi.org/10.1016/j.avb.2016.02.005); The effectivity of disengagement and/or deradicalization (Bjørgo, T. (2011). Dreams and disillusionment: engagement in and disengagement from militant extremist groups. Crime, Law and Social Change, 55(4), 277-285; Gielen, A. J. (2019). Countering Violent Extremism: A Realist Review for Assessing What Works, for Whom, in What Circumstances, and How? Terrorism and Political Violence, 31(6), 1149-1167. URL: https://doi.org/10.1080/09546553.2017.1313736; Horgan, J. G., Taylor, M., Bloom, M. & Winter, C. (2017). From Cubs to Lions: A Six Stage Model of Child Socialization into the Islamic State. Studies in Conflict & Terrorism, 40(7), 645–664. DOI: 10.1080/1057610X.2016.1221252); The role of women and minors (Cook, J. & Vale, G. (2018). From Daesh to 'Diaspora': Tracing the Women and Minors of Islamic State. Report. Department of War Studies, King's College); The role of violent extremism risk assessment tools (Logan, C. & Lloyd, M. (2019). Violent extremism: A comparison of approaches to assessing and managing risk. Legal and Criminological Psychology, 24(1), 141-161. URL: https://doi.org/10.1111/ lcrp.12140; Sarma, K. M. (2017). Risk assessment and the prevention of radicalization from nonviolence into terrorism. American Psychologist, 72(3), 278-288. URL: https://doi.org/10.1037/amp0000121).

- [22] Borum, R., Swartz, M. & Swanson, J. (1996). Assessing and managing violence risk in clinical practice. Journal of Practical Psychiatry and Behavioral Health, 2, 205–215; Borum, R. (2000). Assessing violence risk among youth. Journal of Clinical Psychology, 56, 1263–1288; Monahan, J. & Steadman, H. J. (2001). Violence risk assessment: A quarter century of research. In L. E. Frost & R. J. Bonnie (Eds.), The evolution of mental health law, p. 195–211. American Psychological Association. URL: <a href="https://doi.org/10.1037/10414-010">https://doi.org/10.1037/10414-010</a>; Monahan, J., Steadman, H. J., Silver, E., Applebaum, P. S., Robbins, P. C., Mulvey, E. P., Roth, L., Grisso, T. & Banks, S. (2001). Rethinking risk assessment: The MacArthur study of mental disorder and violence. New York: Oxford University Press; Douglas, K. S., Hart, S. D., Webster, C. D. & Belfrage, H. (2013). HCR-20 V3: Assessing risk of violence User guide. Burnaby, Canada: Mental Health, Law, and Policy Institute, Simon Fraser University.
- [23] Desmarais, S. L., Nicholls, T. L., Wilson, C. M. & Brink, J. (2012). Using dynamic risk and protective factors to predict inpatient aggression: Reliability and validity of START assessments. *Psychological Assessment, 24*(3), 685–700. URL: <a href="https://doi.org/10.1037/a0026668">https://doi.org/10.1037/a0026668</a>; de Vries Robbé, M., de Vogel, V. & Douglas, K. S. (2013). Risk Factors and Protective Factors: A Two-Sided Dynamic Approach to Violence Risk Assessment. *Journal of Forensic Psychiatry & Psychology, 24*(4), 440–457; Lowder, E. M., Desmarais, S. L., Rade, C. B., Johnson, K. L. & Van Dorn, R. A. (2019). Reliability and Validity of START and LSI-R Assessments in Mental Health Jail Diversion Clients. *Assessment, 26*(7), 1347–1361. URL: <a href="https://doi.org/10.1177/1073191117704505">https://doi.org/10.1177/1073191117704505</a>; Ullrich, S. & Coid, J. (2011). Protective factors for violence among released prisoners—Effects over time and interactions with static risk. *Journal of Consulting and Clinical Psychology, 79*(3), 381–390. URL: <a href="https://doi.org/10.1037/a0023613">https://doi.org/10.1037/a0023613</a>.
- [24] Desmarais, S. L., Simons-Rudolph, J., Brugh, C., Schilling, E. & Hoggan, C. (2017). The state of scientific knowledge regarding factors associated with terrorism. *Journal of Threat Assessment and Management*, 4(4), 180–209. URL: <u>http://doi.org/10.1037/ tam0000090</u>
- [25] Di Eugenio B., Glass M. (2004). The kappa statistic: A second look. *Computational linguistics*, 30(1): 95–101; Gwet K. (2002). Kappa statistic is not satisfactory for assessing the extent of agreement between raters. *Statistical Methods for Inter-rater Reliability Assessment*, 1(6), 1–6.
- [26] Landis J. R. & Koch G. G. (1977). The measurement of observer agreement for categorical data. Biometrics, 33(1), 159-174.
- [27] Bjørgo, T. & Ravndal, J. A. (2019). Extreme-Right Violence and Terrorism: Concepts, Patterns, and Responses. ICCT Policy Brief (September 2019). DOI: 10.19165/2019.1.08; Ravndal, J.A. (2016). Right-wing terrorism and violence in Western Europe: Introducing the RTV dataset. *Perspectives on Terrorism*, 10(3), 2–15.
- [28] Schuurman, B. (2020). Research on Terrorism, 2007–2016: A Review of Data, Methods, and Authorship. *Terrorism and Political Violence*, *32*(5), pp. 1011–1026. DOI: 10.1080/09546553.2018.1439023.
- [29] Silke, A. (2001). The Devil You Know: Continuing Problems with Research on Terrorism. *Terrorism and Political Violence*, *13*(4): 1–14. DOI: 10.1080/09546550109609697.
- [30] Schuurman, B. (2019) Topics in Terrorism Research: Reviewing Trends and Gaps, 2007–2016, *Critical Studies on Terrorism*, 12(3), 463–480. DOI: 10.1080/17539153.2019.1579777; Horgan, J. & Boyle, M. J. (2008). A Case against 'Critical Terrorism Studies'. *Critical Studies on Terrorism*, 1(1): 51–64. DOI: 10.1080/17539150701848225. Horgan, J. G. (2017). Psychology of Terrorism: Introduction to the special issue. *American Psychologist*, 72(3), 199–204. URL: https://doi.org/10.1037/amp0000148
- [31] Schuurman, B. (2020). Non-Involvement in Terrorist Violence: Understanding the Most Common Outcome of Radicalization Processes. *Perspectives on Terrorism*, 14(6), 14–26.
- [32] Bowie, N. G. (2017). Terrorism Events Data: An Inventory of Databases and Data Sets, 1968–2017. Perspectives on Terrorism, 11(4), 50–72.
- [33] Crenshaw, M. (2014). Terrorism Research: The Record. International Interactions, 40(4), 556–567. URL: <u>https://doi.org/10</u>.1080/03050629.2014.902817; La Waha, T. (Ed.). (2020). United by Violence, Divided by Cause? A Comparison of Drivers of Radicalisation and Violence in Asia and Europe (1st edition). Baden-Baden: Nomos; Zick, A. (2020). Dynamiken, Strukturen und Prozesse in extremistischen Gruppen. In: B. B. Slama & U. Kemmesies (Eds.)(2020): Handbuch Extremismusprävention, Gesamtgesellschaftlich, Pphänomenübergreifend. Wiesbaden: BKA, pp. 269–311. Schuurman, B. (2020). Non-Involvement in Terrorist Violence: Understanding the Most Common Outcome of Radicalization Processes. Perspectives on Terrorism, 14(6), 14–26.
- [34] For instance: Horgan, J., Shortland, N., Abbasciano, S. & Walsh, S. (2016). Actions Speak Louder than Words: A Behavioral Analysis of 183 Individuals Convicted for Terrorist Offenses in the United States from 1995 to 2012. *Journal of Forensic Sciences*, 61(5), pp. 1228–1237. DOI: 10.1111/1556-4029.13115.
- [35] Bouhana, N. (2019). *The Moral Ecology of Extremism: A Systemic Perspective. London: Commission for Countering Extremism.* URL: <u>https://www.gov.uk/government/publications/the-moral-ecology-of-extremism-a-systemic-perspective</u>.
- [36] Corner, E., Gill, P., Schouten, R. & Farnham, F. (2018). Mental Disorders, Personality Traits, and Grievance-Fueled Targeted

Violence: The Evidence Base and Implications for Research and Practice. *Journal of Personality Assessment*, 100(5), 459–470. URL: <u>https://doi.org/10.1080/00223891.2018.1475392</u>; Lankford, A. (2016). Detecting mental health problems and suicidal motives among terrorists and mass shooters. *Criminal Behaviour and Mental Health*, 26(5), 315–321. URL: <u>https://doi.org/10.1002/cbm.2020</u>.

[37] Pressman, D. E., Duits, N., Rinne, T. & Flockton, J. S. (2018). *Violent Extremism Risk Assessment Version 2 Revised. A structured professional judgment approach.* Utrecht: NIFP.

[38] Ibid.

- [39] Sageman, M. (2014) The Stagnation in Terrorism Research. *Terrorism and Political Violence*, *26*(4), 565–580. DOI: 10.1080/09546553.2014.895649.
- [40] Horgan, J., Shortland, N., Abbasciano, S. & Walsh, S. (2016). Actions Speak Louder than Words: A Behavioral Analysis of 183 Individuals Convicted for Terrorist Offenses in the United States from 1995 to 2012. *Journal of Forensic Sciences*, 61(5), pp. 1228–1237. DOI: 10.1111/1556-4029.13115.