

Thematic Issue Article

Prisoners with Islamist Relations: Are Prisoner Files a Valuable Data Source for Individual Assessment and for Research?

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Abstract

Violent extremism research is still lacking a sound empirical basis for the validation of assessment instruments. Yet there is a growing need for these instruments to assess the dangerousness of individuals, but also the success of interventions. By analysing prisoner files of one female and 39 male inmates (average age 28.83 years, $SD = 7.58$) with administratively assigned Islamism-related security labels in Bavarian prisons, we tried to clarify two questions: Firstly, is it possible to collect relevant data from prisoner files drawing on risk assessment procedures? Secondly, how do inmates associated with the Salafist scene (security label “Salafist scene”) differ from those who are apparently involved with terror networks (security label “terror”), and do these differences predict the risk they pose? Our results suggest that files are a valuable, though not perfect data source for individual assessment and research. The two groups defined by the labels differ significantly in their biographies, mental health, and behaviour. Conclusions pertaining to biographical background factors, risk assessment, and management are discussed.

Keywords

Salafism, Jihadism, radicalisation, file analysis, risk assessment

Given the growing salience of violent extremism, terms such as “Islamist”, “Salafist”, or “Jihadist” have become familiar vocabulary in the general discourse, media, and politics, as well as among researchers and practitioners. The distinction of terms derives from the observation that the majority of individu-

als belonging to the Islamist and Salafist community do not necessarily promote violence or even terrorism and therefore do not pose a direct threat to security (Wiktorowicz, 2006). Nevertheless, belonging to an Islamist group or identification with Islamist ideology is discussed as one possible stage in a violent radicalisation process (Silber & Bhatt, 2007) or as a factor increasing vulnerability to being recruited into jihadist terrorism. On the other hand, it is not necessarily ideology that gets people in touch with relevant networks in the first place. For example, de Bie, de

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Poot, and van der Leun (2014) found that “irregular migrants” (p. 275) in the Netherlands are attracted by the pragmatic benefits of a jihadi network. A similar role of these networks is proposed by Mansour (2016) who refers to Salafists as the “better social workers” (p. 143, translation by the authors) as they offer support and a sense of belonging to a group of “brothers” and “sisters”. These examples illustrate the limitations of stage models, which can only describe a prototypical and very simplified pathway. The concept of equifinality and multifinality in developmental psychopathology (Cicchetti & Rogosch, 1996), which describes the variability in the development of deviance and delinquency, seems to be even more valid to summarise the different pathways to extremist violence. Contradictory results regarding violent extremists’ biographical backgrounds in terms of mental health (see, for example, Silke, 2008; Weenink, 2015) or socioeconomic factors clearly reveal the heterogeneity among violent extremists (see, for example, Post, 2005; Silke, 2008). To summarise, there are still many open questions about the biographical backgrounds of violent extremists and terrorists.

Nevertheless, the timely identification of both individuals vulnerable to radicalisation as well as of those actually posing a threat to public safety is crucial for making decisions regarding risk management and early interventions. On the administrative level, the main responsibility for the identification and classification of people who are at least strongly assumed to pose an actual risk to security lies with the intelligence services, which have access to classified sources and information – for example regarding networks the individuals are involved with. With the challenging growth of Salafist communities, it becomes increasingly important to find additional ways to determine their threat potential. This is particularly important in the prison setting, where extremist prisoners require somewhat different measures to reach the two usual goals of imprisonment: public safety and reintegration into society. Whereas the standard treatment for violent offenders often focusses on mental illness or cognitive-behavioural programmes such as anger management training, radicalised or radicalising individuals may require different or at least additional measures. Especially those who are already engaged in organised structures promoting the use of violence for ideological goals must be supported to disengage from these networks and to distance themselves from attitudes fostering

the acceptance of violence to reach socio-political ends.

However, there have been voices criticising an uncontrolled growth of de-radicalisation or disengagement programmes in Germany, as the effectiveness of interventions is an issue in need of more quantitative research. The evaluation of interventions faces some major methodological challenges: Both the identification of observable behaviour relevant for risk assessment and the evaluation of prevention programmes lack profound knowledge about factors fostering violent radicalisation as well as change-sensitive indicators for ongoing radicalisation or de-radicalisation.

Current Risk Assessment Procedures

Yet there are quite a few structured professional judgement (SPJ) instruments for the assessment of violent extremist offenders. These were developed for being used by forensic experts. Other than actuarial risk assessment tools, SPJ approaches do not result in a sum score related to criminal recidivism but consider the individual in the light of contextual factors. SPJ instruments can be thought of as guidelines for an integrative judgement including suggestions for the treatment and/or management of offenders. As there are no sufficiently validated risk factors allowing a statistically based approach yet, the SPJ currently represents the gold standard for assessing extremist offenders or individuals who are suspected of undergoing a radicalisation process.

The most important instruments at this point are the *Violent Extremist Risk Assessment* (VERA, VERA 2, VERA 2-R; Pressman, 2009, 2014; Pressman & Flockton, 2012; Sadowski et al., 2016), the *Extremism Risk Guidelines* (ERG 22+; Lloyd & Dean, 2015), and the *Terrorist Radicalization Assessment Protocol* (TRAP-18; Meloy & Genzman, 2016; Meloy & Gill, 2016; Meloy, Roshdi, Glaz-Ocik, & Hoffmann, 2015). While VERA and ERG 22+ primarily target offenders and are very similar (for a detailed comparison, see Herzog-Evans, 2018), TRAP-18 particularly focusses on “individuals who present a concern for lone actor terrorism” (Meloy & Genzman, 2016, p. 649). It is presented as a “rationally derived investigative template for risk of individual terrorism” (Meloy et al., 2015, p. 140). TRAP draws on a concept used in meteorology to predict severe weather and storms and distinguishes distal risk factors from proximal warning signs (Meloy & Genzman, 2016).

VERA and ERG 22+ differentiate domains like the individual's motivation, intent, and capability as well as some contextual factors, for example, instrumental resources. These domains widely cover the three factors which Webber and Kruglanski (2007) claim to be essential for radicalisation into violent extremism: An individual with particular *needs*, an *ideology* (or narrative) addressing these needs, as well as a *network* that propagates that ideology, delivers instrumental support, reinforces the extremist mind set, and teaches the required skills.

While the good content validity of violent extremism related risk assessment tools was confirmed in a review by Scarcella, Page, and Furtado (2016), the authors also noted a "lack of transparency, and lack of information with regards to the validity and reliability of the tools" (Scarcella et al., 2016, p. 15). They concluded that "one cannot help but wonder why studies of such a magnitude have not been conducted in a more thorough and extensive manner" (Scarcella et al., 2016, p. 13). This brings up one of the critical points in risk assessment as well as the core problem in the evaluation of preventions and interventions: The existing deficit in quantitative empirical data to validate risk factors and change-sensitive indicators for violent radicalisation. In criminal psychology, a quantitative approach with reliable risk factors and indicators, for example, has succeeded in improving the prediction of criminal re-offending in violent criminals considerably (Gretenkord, 2013). In order to create a sound empirical basis for actuarial approaches, however, a substantial number of cases and systematic analyses are crucial. Yet as far as terrorism and violent radicalisation are concerned, the body of evidence to draw on is very small. The following main obstacles terrorism researchers are facing have been obvious since the late 1980s (see, for example, Schuurman & Eijkman, 2013; Sageman, 2014; Silke, 2001): Besides the fact that terrorist offences – just like acts of targeted violence in general – are very rare events, perpetrators who survive are so severely indoctrinated with the concept of an enemy that their collaboration for research purposes is not very likely. But the problems do not only lie on the side of the subjects of interest: As Merari (2007) describes, reservations of government authorities toward academic research massively inhibit the participation of competent professionals from outside the authorities, for example, of social scientists or psychologists. He concludes that, in this matter, an exchange between academia and government is crucial.

The Present Study

For the present study, we initiated a cooperation between academic researchers with an expertise in psychological assessment, research methods, and legal psychology, and the Criminological Research Unit of the Bavarian Prison System (*Kriminologischer Dienst des Bayerischen Justizvollzugs*). This unit was set up by the Bavarian correctional system and reports to the Bavarian State Ministry of Justice. The latter, in turn, provided us with a list of prisoners with relevant administratively assigned security labels as mentioned above. The main research question was whether prisoners classified as members of the "Salafi scene" and those associated with terrorism are distinct groups and which characteristics differentiates them best, but also to find shared characteristics. Our further concern was to find out how well the current gold-standard risk procedures can be applied to prisoner files if no other source of information is available.

Methods

Procedure

In February 2017, we analysed the files of 40 offenders in Bavarian prisons who had been assigned an Islamism-related security label. These labels are primarily assigned on the basis of information from the intelligence services regarding involvement with Salafist or Jihadist networks or on observations made by prison staff, e.g. if materials distributed or symbols used by such groups were found (see Table 1). In ambiguous cases, an expert on Islamic studies from the Ministry of Justice was consulted for further assessment, which was then used as a basis for the classification.

The security labels were thus *not* primarily assigned based on the offences the inmate had committed. From a risk assessment perspective, this may be quite surprising as in the context of, for example, sex offences, relevant prior convictions are considered to be an important predictor for future offences. However, it should not be assumed that the patterns of general violence prediction models are readily transferable to politically or otherwise ideologically motivated offenders (Dernevik, Beck, Grann, Hogue, & McGuire, 2009). Considering the crucial role of the social context as illustrated by Webber and

Table 1
Islamism Related Security Labels Used in the German Prison System

„Islamist/Salafi scene“	„Islamist terrorism“
Subjects dealing with Islamist/political-Salafist materials, e. g. books or preachings, and/or who are known by the security authorities to be involved with the Islamist/political-Salafist scene.	Subjects attracting attention during imprisonment for being unambiguously involved with jihadist networks and/or who are known by the security authorities to be involved with jihadist networks.
<p>Their main characteristics are:</p> <ul style="list-style-type: none"> • The subject deals with and/or distributing Islamist/political-Salafist materials among prisoners (within the current facility, but also between facilities) and/or • Findings of Islamist/political-Salafist symbols and/or • Correspondence with subjects involved with the Islamist/political-Salafist scene with relevant contents and/or • Personal contact with subjects involved with the Islamist/political-Salafist scene and/or • Salient changes regarding the subject’s appearance or behaviour (e.g. the prisoner distances him-/herself from or depreciates „infidels“, the prisoner declares his/her sympathy related to terror attacks 	<p>Their main characteristics are:</p> <ul style="list-style-type: none"> • Knowledge of relevant authorities (state security, intelligence service) regarding involvement with jihadist networks and/or • The subject deals with and/or distributing jihadist materials among prisoners (within the current facility, but also between facilities) and/or • Findings of Islamist/political-Salafist and/or jihadist symbols

Kruglanski (2017), the networks seem to play an even more important role for violent radicalisation as they spread the ideology, support the recruitment process, impart skills, and offer instrumental support.

To collect information, we analysed prisoner files made available from 14 different correctional facilities in Bavaria. The documents and data analysed in this study enabled us to explore differences between individuals related to the “Salafist scene” and those associated with terrorism. While the project is still ongoing, we can currently provide data of 40 offenders (convicted or on remand). We prioritised cases where the prisoner was to be released soon in order to reduce the number of files unavailable to us. For the presentation of interim results, we strived for an equal number of individuals with a “Salafist scene” and “Islamist terrorism” security label. In some cases, a file that we requested was currently being required by the law enforcement authorities, and thus the analysis had to be postponed.

Prisoner files include various types of information: Criminal indictments and court opinions underlying the current incarceration, the prisoners’ statements concerning their offences, protocols, forensic expert reports, biographical information, requests the prisoner made during detention, documents from prison professionals, and other relevant information, such as copies of letters sent to or received by the prisoner. Some of these files consist of one, others of up to eight volumes, depending upon the number and size of documents available. In a first step,

we compiled an anonymised qualitative summary of each file, including the individual’s developmental history as far as it could be reconstructed, the available information about prior criminal activity, current offences, and existing expert reports, for example, on mental health, personality, or other specific areas if available. We also collected all available information about relationships in- and outside prison, as well as behavioural observations recorded.

In a second step, we focused on our primary goal to apply methods allowing a quantitative analysis. Therefore, we developed a coding scheme based on indicators drawn from publications on risk assessment procedures. Indicators belonging to a common domain of characteristics were summed up. Although those sum scores do not represent psychometric scales in the original sense, we assumed that a higher sum of present indicators might correlate with the security labels. Since SPJ procedures for extremists have barely been validated (Scarcella et al., 2016) and have not been developed for the purpose of file analysis, our coding scheme was intended to operationalise not only the presence or absence of characteristics, but also the availability of information. Thus, the four categories derived from these two dimensions were:

- 1) Information is available; the characteristic is present (“yes”)
- 2) Information is available; the characteristic is not present (“no”)

- 3) There is no information available in the file (“no info”)
- 4) There is available information, but it is inconsistent (“unclear”)

The coding was conducted by three researchers. All of them were graduate psychologists with a research focus on legal psychology, diagnostics, and research methods. They were introduced into violent extremism risk assessment procedures by the project leaders who had received intensive training for VERA. The coding team was instructed to only code “yes” if they found unambiguous information that a factor or characteristic was present and “no” if they found unambiguous information that a factor or characteristic was not present. To make the coding decisions traceable, the source of the respective information was registered.

Before collecting the data, we performed several test runs and discussed ambiguities or insecurities regarding the coding in team sessions. We then randomly selected three cases for the assessment of interrater reliability (see results reported in the next section).

For the statistical analyses, we used SPSS (version 25). Differences on item level were analysed using cross-tables and the chi-square test together with Fisher’s exact test for significance testing, because of the partially small number of valid cases. For the interval level sum scores and other metric data, we used *t*-tests. For a multivariate integration of the available information, we finally conducted a discriminant analysis.

Measures

For our main research question, we needed to gather relevant information used to estimate the risk for violent radicalisation. We therefore extracted indicators from publications on VERA, ERG 22+, and TRAP-18. VERA and the ERG 22+ are conceptualised in a similar manner, each including domains assessing a subject’s motivation, capability, and intent. VERA encompasses five domains (*beliefs and attitudes, commitment and motivation, context and intent, history and capability, protective indicators*) and ERG 22+ three (*engagement, intent, capability*). TRAP-18 differentiates between two aspects, one of which refers to more general risk factors (*distal characteristics*), and the other one to a set of *proximal warning behaviours*.

As we were interested in also finding out about detailed biographical information and behavioural indicators, we included a set of *biographical strain factors* which had been studied in the context of adolescents’ reoffending after release from prison. Endres, Breuer, and Nolte (2016) examined the presence of 20 events in the biographies of young offenders and found out that a simple sum score representing the number of indicators present in the individual case could predict re-imprisonment after release from the correctional facility. These factors were, for example, parents living apart from each other, early loss of a parent, placement in foster care, neglect, or abuse in the family of origin.

An unpublished list of *behavioural indicators for Islamist extremism*¹ that we used was developed by Wetzky (2016) and kindly forwarded to us for use in the present study. Wetzky had assembled the indicators based on his own observations in the context of social work with juveniles. One example from the list is: *The adolescent decorates his or her room with radical Islamist flags, symbols or pictures, or the adolescent refuses to shake women’s hands*. The original purpose of the document was to inform about possible indicators for Islamist radicalisation. The recipients of the document were encouraged to observe such behaviours and to discuss the observations with colleagues as a basis for finding appropriate measures, if necessary.

As a basis for our quantitative analyses, we computed sum scores for all instruments we used, including the SPJ instruments. This was done by adding the frequency of “yes” and “no”-codes resulting in two scales for each instrument and domain. We also used the frequencies of “unclear” and “no information” codes and calculated the percentage of indicators for which no unambiguous information could be found in the files.

In order to calculate the interrater reliability, three randomly chosen prison files were each rated by three trained research assistants. We calculated intra-class correlations (ICC) for the sum scores (method used: two-way random) in order to estimate the average reliability with regard to each assessment tool across the three raters. The resulting correlations can be interpreted as the interrater reliability of the coding procedure. The intra-class correlation scores ranged between $r_{icc} = 0.68$ and $r_{icc} = 0.91$, which can be considered satisfactory (see Table 2). The results of the interrater reliability for all instruments based on the

¹We will refer to it briefly as “behavioural indicators”.

Table 2
Interrater Reliability Coefficients

Instruments	Interrater reliability (ICC)
VERA	0.84
TRAP-18	0.83
ERG 22+	0.83
Biographical strains	0.91
Behavioural indicators	0.68

coding procedure we had developed can be judged as rather promising.

We also calculated correlation coefficients between all scales for the mutual validation of the risk assessment procedures. These turned out to be satisfactory or even high, especially regarding the scales which we created from risk assessment instruments (see Table 3). Interestingly, the number of observed behavioural indicators did indeed correlate with the number of present indicators drawn from risk assessment instruments. The number of biographical strains, in turn, correlated moderately with the number of observed behavioural indicators, but not with the sum scores from risk assessment tools.

Subjects

Demographics

The prisoners in our sample were – with the exception of two cases – male Muslims. All cases had been incarcerated for an average of 18.15 months so far ($SD = 16.40$), with the shortest period being one month, the longest 62 months (5 years and 2 months). The average age was 28.83 years ($SD = 7.58$). A rather small proportion was married (15%) while the majority was not (75%). The rest were divorced or separated. Their education could in many cases not be tracked back reliably, but from the information we had, the majority had substantial deficits, with only about 27.5% having completed an acknowledged education or training until the beginning of the detention.

For 62% we found a permanent residence in Germany. Whereas 42.5% were German citizens, only 32.5% were born in Germany; 47.5% were born in the Middle East or North Africa, 7.5% (3 cases) in the former Soviet Union, 5% (2 cases) in former Yugoslavia, and 2.5%, that is one subject each, in Turkey, in another country, or from unknown origin.

Criminal History and Causes for Current Imprisonment

Of all subjects, 37.5% had a prior criminal record. The offences leading to the current detention including relevant crimes are presented in Tables 4a and 4b.

Results

Usefulness of Prisoner Files and Risk Assessment Instruments for Information Collection

We first tested the usefulness of the risk assessment instruments for gathering information about the prisoners' characteristics based on file information. We found that a substantial share of indicators of the individual instruments could not be coded based on the information provided by the files. Regarding ERG 22+, an average of 22.5% of the indicators assessing the individual's capability was not assessable in terms of being rated as either "unclear" or "no information available". Within the subscale "engagement and motivation" of VERA, the files did not provide information on over half of the indicators on average. A similar share of indicators which could not be clearly assessed with "present" or "not present" was found in the list of behavioural indicators for Islamist extremism. The results for each instrument and the single domains are presented in Table 5.

Overall, a substantial number of indicators could be coded in only 50% of the cases or less. This was true for 22.7% of the indicators taken from both ERG 22+ and the list of biographical strains, 27.8% of the indicators taken from TRAP-18, 35.3% of the indicators taken from VERA, and 66.7% of the behavioural indicators. The particular indicators with the highest frequency of unavailable information were *victim of sexual abuse* (90%) or *neglect* (87.5%; both taken from the list of biographical strains), and *refuses handshake with women* (87.5%, taken from the list of behavioural indicators). The indicators for which information was available in almost all cases were *conspicuous physical appearance* (e.g. *facial tattoos*) and *unemployment before the offense* (no missing or unclear information; both taken from the list of biographical strains), and *failure regarding occupational goals* (missing in only one case; item taken from TRAP-18).

We also tested for differences between the groups, but the average proportion of indicators we could not code did not differ significantly: In the "Salafi scene"

Table 3
Correlation Coefficients Between Sum Scores of Present Indicators

	Behavioural indicators	VERA	TRAP-18	ERG 22+
Biographical strains	0.40**	0.04	0.04	-0.07
Behavioural indicators		0.53***	0.61***	0.46***
VERA			0.72***	0.87***
TRAP-18				0.68***

** $p < 0.01$, *** $p < 0.05$.

group, an average of 40.1% of the indicators was coded as “not assessable” ($SD = 18.3\%$) and, almost equally, 42.1% ($SD = 16.7\%$) in the group of individuals with a “terror” label. Differences on the level of the single instruments were not significant either and there were also no outliers in the total sample.

Group Comparisons

Demographic Data and Personal Background

Since the frequencies concerning citizenship were unevenly distributed and the number of cases was rather small, we created three categories for a statistical test: German, other countries with a (predominately) Islamic culture (Middle East, North Africa, and Turkey), and other countries without a predominantly Islamic culture such as ex-Soviet Union and ex-Yugoslavia (this category included also the “other” and “unknown” category). Of the 20 individuals of the “Salafist scene”, 25% were citizens from a predominantly Islamic-cultural state, 40% were German citizens, and 35% were citizens from a country without a dominating Islamic culture. Of the individuals in the “terror” group, half were citizens of an Islamic culture; 45% were German citizens, and 5% (one case) from a non-Islamic country. The difference was significant, $\chi^2(2) = 6.23, p < 0.05$, indicating that among individuals with a “terror” security label, citizenship other than German or from predominantly Islamic-cultural countries was barely present. Concerning other features such as education, family, or marital status, and age, no significant differences between the two groups were found. Regarding the prior criminal records, within the “Salafist scene” group, exactly 50% had been convicted of other offenses before; this was true for only 25% of individuals in the “terror” labelled group, $\chi^2(1) = 2.67, n. s.$

Information from Instruments

On the sum score level, we compared the frequencies of “yes” and “no” ratings for all instruments

Table 4a
Offenses Leading to Current Detention (Categorised; $N = 40$)

	<i>n</i>	%
Offenses against German Alien law	3	7.5
Sex offenses	4	10.0
Drug related offenses	5	12.5
Fraud	6	15.0
Violent offenses	8	20.0
Property offenses	10	25.0
Relevant offenses (pertaining to terrorism/extremism)	15	37.5

Note. Since most subjects were sentenced for or accused of more than one offense, the sum of categorised offenses exceeds 100%.

Table 4b
Detailed Overview of Relevant Offenses ($n = 15$) in the Current Sample

	<i>n</i>	%
Sedition (§130 StGB)	1	2.5
Membership in terrorist organization (§129a StGB)	6	15.0
Preparation of serious act of violent subversion (§89a StGB)	5	12.5
Both §89a and §129a StGB	3	7.5

Note. StGB (Strafgesetzbuch) = German Penal Code.

and domains. There were more significant differences regarding the sum scores of the “no” ratings than with regard to the “yes” ratings. We found that in the risk assessment tools, in general, “yes” was most frequently coded for individuals in the “terror” labelled group, whereas “no” ratings were significantly more present in the “Salafist scene” group. The same pattern appeared concerning the behavioural indicators which were more frequently observed among individuals with a “terror” label. However, the sum of biographical risk factors coded as “yes” was on average higher for the “Salafist scene” members indicating that this group was burdened with a larger number of stressful life events in their biographies. An overview of the results is presented in Table 6.

On the single item level, we found more elaborate plans to commit an attack among the “terror” labelled subjects who were, over all, more indoctrinated, more capable, and more committed to the cause. The “Salafist scene” group, however, was mentally less

Table 5
Average Percentage of Indicators not Assessable from the Files (N = 40)

Instrument	M	SD
VERA (complete)	45.22	19.22
Engagement and motivation	52.19	28.29
Beliefs and attitudes	47.86	28.85
Context and intent	43.93	30.93
Protective indicators	41.67	23.27
History and capability	37.92	29.23
TRAP-18 (complete)	38.06	22.59
Proximal warning behaviour	41.25	30.51
Distal characteristics	35.50	22.07
ERG 22+ (complete)	36.47	20.49
Engagement	41.15	26.22
Intent	33.33	24.46
Capability	22.50	23.13
Behavioural indicators	54.50	23.04
Biographical strains	36.82	22.36

stable than the other group, and had more substance abuse problems. As for particular behaviours, subjects with a “terror” label used gestures more often whereas subjects of the “Salafist scene” group distinguished themselves by using more verbal threats. These differences are summarised in Table 7.

For the results concerning the inmates’ behaviour and mental health, we assumed that the subjects in the „Salafist scene” group might be more impulsive in contrast to the more disciplined individuals in the „terror” labelled group. We therefore analysed differences in the frequency of disciplinary measures imposed by the prison authorities in the case of misconduct, expecting that there would be more entries to be found in the files of the "Salafist scene” group members. The statistical test showed that there was a difference and, as expected, only 10% of prisoners with a “terror” label had relevant file entries (one subject each for violent and for non-violent misconduct); in the „Salafist scene” group, there were only 55% without disciplinary measures, 30% who

were disciplined for non-violent misconduct, 5% (one subject) for violent misconduct, and 10% (two subjects) for violent and non-violent incidents of misconduct, $\chi^2(3) = 7.26, p < 0.05$.

Discriminant Analysis

To substantiate our results, we ran a discriminant analysis including all sum scores which significantly contrasted the two groups. We combined the scales created from “yes” and “no” codes to make a prediction. This procedure resulted in a discriminant function which allows calculating the ratio of correct and incorrect predictions of group membership on the basis of the included sum scores.

Our analysis resulted in a total of 77.5% correct predictions, with belonging to the "terror” labelled group being predicted more accurately than belonging to the "Salafist scene” labelled group (see Table 8). The size of the eigenvalue (0.67) and the canonical correlations between the variables and the discriminant function were $R = 0.63$ with Wilk’s $\Lambda = 0.60$ which is quite satisfactory. The effect size, expressed by the canonical correlation, was $R = 0.40$.

The statistics of the structure matrix can be interpreted like loadings of a factor analysis, with higher values illustrating the importance of the scales for the discriminant function (see Table 9). The weightiest subscales were *proximal warning behaviour* (TRAP-18) and *capabilities* (ERG 22+), both based on the frequency of “no”-ratings. Important domains based on the frequencies of “yes” ratings were *history and capability* (VERA) with higher scores among individuals who had been assigned the "terror” label and the biographical risk factors with higher scores in the “Salafist scene” group.

Table 6
Group Differences for Sum Scores

	Scene M (SD)	Terror M (SD)	t(38)
VERA complete (present)	8.75 (5.01)	12.20 (5.84)	-2.01+
Context and intent (present)	2.15 (1.84)	3.55 (1.99)	-2.31+
History and capability (not present)	1.75 (1.75)	0.85 (0.88)	2.09***
TRAP-18 complete (not present)	7.65 (4.53)	5.10 (3.26)	2.04*
Proximal warning behaviour (not present)	3.85 (2.78)	1.65 (1.76)	3.00**
ERG 22+ complete (present)	8.90 (3.77)	11.40 (4.49)	-1.95+
Capability (present)	1.40 (0.60)	1.80 (0.70)	-1.91+
Capability (not present)	1.00 (0.73)	0.45 (0.61)	2.60**
Sum of biographical strains (present)	5.95 (3.41)	3.90 (3.19)	1.96+
Behavioural indicators (not present)	5.45 (3.71)	3.35 (2.80)	2.02***

+ $p < 0.07$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Discussion

Our main research aim was to identify differences between prisoners who had been assigned an administrative security label for being associated with the “Salafi scene” and those who had a “terror” label. These differences may be relevant when it comes to assessing their threat to security. We were also interested in the subjects’ biographies and behaviours and wanted to investigate if diagnostically meaningful differences could be identified.

Differences between prisoners with the “Salafi scene” label and those with the “terror” label were found regarding the individuals’ intents and capabilities, but also with regard to the sum of biographical strains and behavioural indicators. Interestingly, the differences often appeared in the frequency of absent factors: In the „Salafi scene” group, more indicators were rated as “not present” concerning *history and capability, proximal warning*

signs as well as behavioural indicators. We therefore conclude that, firstly, the most valid domains of the risk assessment instruments concern the intention and capability of an extremist whereas motivational factors might play a subordinate role in constituting the risk posed by these offenders. This may be explained by the simple reason that they are probably not willing to disclose their beliefs and motivations. Secondly, results suggest that it is also important to consider the characteristics *not* present in order to assess an individual thoroughly, indicating potential inhibiting elements within the pathway to violent extremism. The results of the discriminant analysis showed that combining as much information as possible on present and absent factors can lead to a good prediction, even if the information source is limited.

Not all inmates with Islamism-related security labels came from mainly Islamic countries or from religiously devout families. Nevertheless, other than in the “Salafist scene” group, all but one of the

Table 7
Group Differences for Selected Indicators (Sum of Present Indicators)

	%		$\chi^2(1)$	Valid n	
	Within Scene	Within Terror		Within Scene	Within Terror
Elaboration					
Pathway (in terms of planning or preparing a violent act; TRAP-18)	9.1	81.8	11.73***	11	11
Expressed intent to plan, prepare violent action (VERA)	40.0	92.3	7.30**	10	13
Identification of target for attack (VERA)	8.3	54.5	5.79**	12	11
Capabilities					
Tactical, paramilitary, explosives training (VERA)	9.1	75.0	10.15***	11	12
Individual knowledge, skills and competencies (ERG 22+)	29.4	80.0	8.19**	17	15
Access to funds, resources, organizational skills (VERA)	50.0	85.7	3.87*	12	14
Indoctrination					
Extremist ideological training (VERA)	12.5	90.0	10.81***	8	10
Watching videos with radical contents (behavioural indicators)	18.2	81.8	5.32**	4	9
Mind-set					
Identification (TRAP-18)	33.3	100.0	11.24***	12	11
Need to redress injustice and expressed grievances (ERG 22+)	40.0	84.6	4.96**	10	13
Need to defend against threat (ERG 22+)	14.3	80.0	5.18**	7	5
Mental health (ERG 22+) [†]	70.00	31.3	5.36**	20	16
Substance abuse	60.0	25.0	5.01*	20	20
Other behaviour					
Threats to use violence (behavioural indicators)	70.0	30.0	3.93*	19	15
Index-finger sign (behavioural indicators)	9.1	71.4	7.48**	11	7

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. [†]We used a reversed wording (mental problems).

Table 8
Results of the Discriminant Analysis

		Predicted Group Assignment		
		Scene	Terror	
Actual Group Assignment	Scene	15 (75%)	5 (25%)	$\sum 20$
	Terror	4 (20%)	16 (80%)	$\sum 20$
		$\sum 19$	$\sum 21$	$n = 40$

Note. 77.5% correct predictions; discriminant function: $\chi^2 = 17.91$, $df = 6$, $p < 0.01$.

Table 9
Results of the Discriminant Analysis: Group Statistics for Sum Scores and Structure Coefficients

Domains	Scene <i>M</i> (<i>SD</i>)	Terror <i>M</i> (<i>SD</i>)	Structure Coefficient
<i>Capability (ERG 22+)</i>	1.00 (0.73)	0.45 (0.61)	0.52
Context and intent (VERA)	2.15 (1.84)	3.55 (1.99)	-0.46
<i>History and Capability (VERA)</i>	1.75 (1.71)	0.85 (0.88)	0.42
<i>Behavioural Indicators</i>	5.45 (3.71)	3.35 (2.80)	0.40
Biographical Strains	5.95 (3.41)	3.90 (3.17)	0.34

Note. Italics refer to sum scores calculated from what was coded as “not present”.

non-German citizens in the group of inmates with a “terror” label came from countries characterised not only by Islamic culture, but also by small and determined anti-Western movements originating in historical and current political relations revolving around topics like colonialization or social reform. Some of the “terror” labelled prisoners’ pathways may thus not have started their radicalisation at a turning point emerging from a personal crisis. They could as well be emissaries or radicalisers sent to the West by a highly organised political group in order to commit attacks.

Biographical strains and substance abuse were more common in individuals among the “Salafist scene” group and less frequent in the group of prisoners with a “terror” security label. The latter showed less mental health issues overall and had slightly fewer prior criminal convictions. It becomes apparent that, in contrast to the prisoners with the “terror” security label, a large number of the “Salafist scene” members in prison are characterised by many biographical strains, which may have led to symptoms of psychopathology, drug abuse, or criminal activities. This difference supports evidence by Corner, Gill, and Mason (2015) who found a correlation between co-offending and mental stability in terrorists and inferred a selection effect: “[Terrorist groups] prioritise certain traits that correspond to what they believe makes a good recruit (e.g. trustworthiness, ability to follow instructions, discretion)” (Corner et al., 2015, p. 561). These required characteristics do not seem to apply to many of the assumed Salafists in prisons, although some of them might support the use of violence. However, “wanting to be a terrorist is not enough to become a terrorist” (Corner et al., 2015, p. 561). This does, in turn, not rule out that a vulnerable person with radical beliefs might be *used for* terrorism – as a living weapon, for example. Individuals who are highly burdened with biographical problems may be very open to a complete re-start in an alternative frame of reference – for example, as a soldier, a warrior, a chosen fighter for a major cause (Endres & King, 2018). This could make them easy

to be recruited, but, compared to fanatical Jihadists, also more open for *positive* influence in a prison setting: Outside prison, they may be easy to manipulate by organisations or charismatic leaders with harmful objectives, but they might also be a more promising target for interventions.

A look at the results of the risk assessment may help to bring a bit more clarity to the actual threat posed by individuals with the “Salafist scene” and “terror” labels. Overall, the sum scores we calculated from “present” characteristics were higher among individuals with a “terror” label, but we also found some grey areas characterised by overlaps between the groups; this might be worth analysing more thoroughly. A crucial moment certainly lies in the transition from an abstract idea to the actual preparation of a violent attack. The majority of subjects who had been assigned a “terror” security label, but also almost half of the “Salafist scene” group had obviously *intended* to plan or commit an act of extremist violence. A Rubicon-type transition from a motivational to a *volitional* state of mind (Heckhausen & Gollwitzer, 1987) in terms of *actual* information collection, plans or preparations, however, was identified less frequently in prisoners with a “Salafist scene” label.

A further area in which we found differences concerned the subjects’ capabilities: Most subjects with the “terror” security label can be summarised as highly capable in terms of having financial resources, knowledge, and skills gained from pertinent – partially military – training. The latter was found in only few in the group with the “Salafist scene” label, with almost a third having some competencies, but rarely particular practical skills from training. A further aspect in the “making of” a terrorist is some sort of ideological indoctrination and the files showed that indoctrination had taken place more frequently in individuals with a “terror” label than in the “Salafist scene” group. However, indoctrination is a gradual process (Baron, 2016). It can happen in a variety of settings and with various mediums, beginning with a more or less subtle indoctrination through the teachings of a fundamentalist preacher in a mosque (Pinto,

2004) or morally loaded videos, but it also takes place in training camps, and videos may also show beheadings or other violent acts. We found watching these videos slightly more often than trainings in the “Salafist scene” group and indoctrination more often than watching videos in the group of inmates with a “terror” label, but the item lists we used did not target more specific information on how the indoctrination had taken place in detail. What we can conclude is that individuals in Jihadist networks are obviously more frequently and probably more strongly indoctrinated than those in the Salafist scene and the question arises whether, in general, more indoctrination imposed on the latter would lead them to adopt a Jihadist mindset, too.

In summary, the information we collected and evaluated illustrated what Bock (2017) described as “primary” and “secondary” radicalisation: Whereas the former describes the pathway taken by individuals with a “strong underlying interest in essential questions including religion and morals” (p. 454, translated by the authors), the latter phenomenon concerns individuals with a criminal career who use fragments of an ideology as a technique of neutralisation. Not surprisingly, Bock (2017) also points out that this is particularly true for individuals who radicalise in prison. This matches the differences we found between prisoners associated with the “Salafist scene” and those with a “terror” label: In contrast to the latter, the “Salafist scene” in prisons seems to come from a multi-level problem environment as it is also common in “normal” criminal offenders’ development.

Those who are susceptible for (more) indoctrination might also be open for interventions. These might include using counter narratives and the elaboration of a positive outlook if the rehabilitation measures in prison are accepted. However, prisoners not yet involved in terror networks but showing critical characteristics (such as actually preparing an attack or being equipped with relevant skills) should be taken seriously as a potential threat as it cannot be ruled out that some of them are already on a pathway to terrorism.

Limitations

For the interpretation of our results, it should be kept in mind that the administrative labels we used as dependent variable do not represent “natural” groups. “Salafists” and “terrorists” were defined by

intelligence regarding networks or communities they were involved with or by materials they were dealing with which are indicators for being at least interested or involved in such networks. Since the categories mainly reflect groups of people among whom ideologies and ideas are shared, and since these ideas are relevant for national security, we adhered to the definitions used by the authorities and did not try to define groups based on, for example, offences only.

To collect information in a systematic manner, we used a method that may seem unconventional to social scientists but which, in fact, constitutes standard practice for most experts in the field: We did not talk to the subjects we examined or draw on other self-report data. Instead, we used prisoner files hoping to be able to extract relevant information. To define relevant information, we used indicators from risk assessment instruments for violent extremism, a list of relevant behaviours and a list of biographical factors. The latter was the only instrument that was actually intended to be used for the prediction of violent behaviour on a statistical basis. For the others, we developed a coding scheme and tried to code as thoroughly as possible if a characteristic was present, absent, or if we simply didn’t know for sure if it was present or not. Although we were aware that the SPJ procedure is not supposed to aggregate indicators into a sum score, we counted the frequency of present and not present indicators in order to have metric measures for quantitative analyses. For the assessment of individual cases, however, this procedure would of course be insufficient.

We used the scores of “present” and “not present” characteristics to analyse our data using quantitative methods. And although we are able to present interpretable results, one must keep in mind that the results suffer from a bias: The “sums” of single characteristics are only the sums of what we know from the files and the range of indicators we could actually assess varied considerably. If in one case three indicators on a list of ten characteristics were coded “present”, this does not mean that the other seven were not present: Those we could not clearly code as “not present” may, in fact, have been present or not.

Considering the large number of indicators we could not assess on the basis of the files, we deem it necessary to generally discuss the instruments used for violent extremism risk assessment. Our results suggest that with VERA, ERG 22+, and TRAP-18, there are instruments available that offer a valuable guideline when it comes to assessing risk of violent extremist offending. Overall, many of characteristics we examined differentiated prisoners associated with

terror networks from those involved with the “Salafist scene”. This was even true for sum scores, which supports the validity of the instruments or at least some domains. However, characteristics regarding the individuals’ innermost thoughts in terms of motivation and beliefs were particularly difficult to assess and did not differentiate between the groups. Moreover, some of the indicators, such as the identification of a target, could only have become obvious after an attempt to commit an offense. These indicators should not be used in retrospect. For prospective risk assessment, it is highly doubtful that individuals involved in a network will readily reveal their intentions to a person trying to assess their threat potential. It is thus clear that indicators such as the identification of a target as suggested in VERA can only be assessed if classified intelligence is available. Yet the instruments are developed by forensic experts who do not automatically have such information. This aspect has also been criticised in a recent paper by Herzog-Evans (2018) who compared VERA with ERG 22+ in the light of usefulness in the French context.

For future research, particularly research relying on files, we would recommend elaborating the coding procedures more thoroughly and assess the inter-rater reliability on a single item level to reduce bias, increase reliability, and focus on assessable indicators as suggested by Göbel et al. (2016). They developed a codebook for a systematic file analyses to help manage unavailable information and to reduce the bias that comes with the coding of “not present” characteristics.

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References

- Baron, R. S. (2016). Arousal, capacity, and intense indoctrination. *Personality and Social Psychology Review*, 4, 238-254. Doi: 10.1207/S15327957PSPR0403_3
- Bock, M. (2017). Radikalisierung. Ein Essay mit der Absicht der Verfremdung. [Radicalisation. An essay intended to alienate.] *NK Neue Kriminalpolitik*, 29, 450-468. Doi: 10.5771/0934-9200-2017-4-450
- Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and Psychopathology*, 8, 597-600. Doi: 10.1017/S0954579400007318
- Corner, E., Gill, P., & Mason, O. (2015). Mental health disorders and the terrorist: A research note probing selection effects and disorder prevalence. *Studies in Conflict and Terrorism*, 39, 560-568. Doi: 10.1080/1057610X.2015.1120099
- de Bie, J. L., de Poot, C. J., & van der Leun, J. P. (2014). Jihadi networks and the involvement of vulnerable immigrants: Reconsidering the ideological and pragmatic value. *Global Crime*, 15, 275-298. Doi: 10.1080/17440572.2014.930349
- Dernevik, M., Beck, A., Grann, M., Hogue, T., & McGuire, J. (2009). The use of psychiatric and psychological evidence in the assessment of terrorist offenders. *Journal of Forensic Psychiatry and Psychology*, 20, 508-515. Doi: 10.1080/13501760902771217
- Endres, J., Breuer, M. M., & Nolte, K. (2016). Wiederinhaftierung nach Entlassung aus dem Jugendstrafvollzug. [Reincarceration after release from juvenile prison.] *Monatsschrift für Kriminologie und Strafrechtsreform*, 99, 342-362.
- Endres, J., & King, S. (2018). Radikalisierung und Deradikalisierung im Justizvollzug. [Radicalisation and de-radicalisation in prison.] In A. Armbrorst & M. Walsh (Eds.), *Evidenzbasierte Kriminalprävention in Deutschland. Ein Leitfaden für Politik und Praxis* [Evidence based crime prevention in Germany. A guide for politics and practice] (pp. 511-530). Wiesbaden: Springer. Doi: 10.1007/978-3-658-20506-5_27
- Göbel, K., Sommer, F., Taefi, A., Stetten, L., Ahlig, N., Allwinn, M., Leuschner, V., & Scheithauer, H. (2016). Entwicklung und Reliabilitätsprüfung eines interdisziplinären Codebooks zur wissenschaftlichen Analyse von Straftakten zu Mord- und Totschlagsdelikten. [Development and reliability test of an interdisciplinary code book for a file-based analysis of murder and manslaughter cases.] *Rechtspsychologie*, 4, 429-447. Doi: 10.5771/2365-1083-2016-4-429
- Gretenkord, L. (2013). Warum Prognoseinstrumente? [Why risk assessment instruments?] In M. Rettenberger & F. von Franqué (Eds.), *Handbuch kriminalprognostischer Verfahren* [Handbook of risk assessment procedures] (pp. 19-36). Göttingen: Hogrefe.
- Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion*, 11, 101-120. Doi: 10.1007/BF00992338
- Herzog-Evans, M. (2018). A comparison of two structured professional judgement tools for violent extremism and their relevance in the French context. *European Journal of Probation*. Doi: 10.1177/2066220317749140
- Lloyd, M., & Dean, C. (2015). The development of structured guidelines for assessing risk in extremist offenders. *Journal of Threat Assessment and Management*, 2, 40-52. Doi: 10.1037/tam0000035
- Mansour, A. (2016). *Generation Allah: Warum wir im Kampf gegen religiösen Extremismus umdenken müssen*. [Generation Allah: Reasons to re-think religious extremism.] (5. Auflage). Frankfurt am Main: S. Fischer.
- Meloy, J. R., & Genzman, J. (2016). The clinical threat assessment of the lone-actor terrorist. *The Psychiatric Clinics of North America*, 39, 649-662. Doi: 10.1016/j.psc.2016.07.004
- Meloy, J. R., & Gill, P. (2016). The lone-actor terrorist and the TRAP-18. *Journal of Threat Assessment and Management*, 3, 37-52. Doi: 10.1037/tam0000061
- Meloy, J. R., Roshdi, K., Glaz-Ocik, J., & Hoffmann, J. (2015). Investigating the individual terrorist in Europe. *Journal*

- of Threat Assessment and Management, 2, 140-152. Doi: 10.1037/tam0000036
- Merari, A. (2007). Academic research and government policy on terrorism. *Terrorism and Political Violence*, 3, 88-102. Doi: 10.1080/09546559108427094
- Nordbruch, G. (2017). *Staatliche Kontrolle statt zivilgesellschaftlichem "Wildwuchs"? Präventions- und Ausstiegsarbeit in Deutschland*. [State control instead of civic proliferation? Activities to promote prevention and disengagement in Germany.] Retrieved from <https://bag-relex.de/2017/10/23/staatliche-kontrolle-statt-zivilgesellschaftlichem-wildwuchs-praeventions-und-ausstiegsarbeit-in-deutschland/>
- Pinto, M. D. C. (2004). *Islamist and Middle Eastern terrorism: A threat to Europe?* Soveria Mannelli (Catanzaro): Rubbettino.
- Post, J. M. (2005). The socio-cultural underpinnings of terrorist psychology: 'When hatred is bred in the bone'. In T. Bjørge (Ed.), *Root causes of terrorism: Myths, reality, and ways forward* (pp. 54-69). London: Routledge.
- Pressman, E. D. (2009). *Risk assessment decisions for violent political extremism*. Ottawa, ON: Canadian Centre for Security and Intelligence Studies, Carleton University. Retrieved from <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2009-02-rdv/index-en.aspx>
- Pressman, E. D. (2014). Violent extremist risk assessment. Issues and applications of the VERA 2 in a high-security correctional setting. In A. Silke (Ed.), *Political violence. Prisons, terrorism and extremism. Critical issues in management, radicalisation and reform* (pp. 122-143). London, New York: Routledge.
- Pressman, E. D., & Flockton, J. (2012). Calibrating risk for violent political extremists and terrorists: The VERA 2 structured assessment. *The British Journal of Forensic Practice*, 14, 237-251. Doi: 10.1108/14636641211283057
- Sadowski, F., Rossegger, A., Pressman, E. D., Rinne, T., Duits, N., & Endrass, J. (2016). Das Violent Extremist Risk Assessment Version 2 Revised (VERA-2R). Eine Skala zur Beurteilung des Risikos extremistischer Gewalt. Deutsche Übersetzung. [The Violent Extremist Risk Assessment Version 2 Revised (VERA-2R). A scale to assess the risk for extremist violence. German translation.] *Kriminalistik*, 71, 335-342.
- Sageman, M. (2014). The stagnation in terrorism research. *Terrorism and Political Violence*, 26, 565-580. Doi: 10.1080/09546553.2014.895649
- Scarcella, A., Page, R., & Furtado, V. (2016). Terrorism, radicalisation, extremism, authoritarianism and fundamentalism: A systematic review of the quality and psychometric properties of assessments. *PLoS One*, 11, 1-19. Doi: 10.1371/journal.pone.0166947
- Schuurman, B., & Eijkman, Q. (2013). *Moving terrorism research forward: The crucial role of primary sources* (ICCT Background Note). Retrieved from International Centre for Counter-Terrorism website: <https://www.icct.nl/download/file/Schuurman-and-Eijkman-Moving-Terrorism-Research-Forward-June-2013.pdf>
- Silber, M. D., & Bhatt, A. (2007). *Radicalization in the West: The homegrown threat*. New York: New York City Police Department. Retrieved from <https://www.prisonlegalnews.org/news/publications/radicalization-in-the-west-the-homegrown-threat-nypd-2007pdf/>
- Silke, A. (2001). The devil you know: Continuing problems with research on terrorism. *Terrorism and Political Violence*, 13, 1-14. Doi: 10.1080/09546550109609697
- Silke, A. (2008). Holy warriors: Exploring the psychological processes of Jihadi radicalization. *European Journal of Criminology*, 5, 99-123. Doi: 10.1177/1477370807084226
- Webber, D., & Kruglanski, A. (2017). Psychological factors in radicalization: A "3N" approach. In G. LaFree & J. D. Freilich (Eds.), *Wiley handbooks in criminology and criminal justice. The handbook of the criminology of terrorism* (pp. 33-46). Chichester, West Sussex: Wiley-Blackwell.
- Weenink, A. W. (2015). Behavioral problems and disorders among radicals in police files. *Perspectives on Terrorism*, 9. Retrieved from <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/416>
- Wetzky, J. (2016). *Infoblatt zu Hinweisen auf islamistischem Extremismus*. [Info sheet on indicators for Islamist extremism.] Unpublished manuscript.
- Wiktowicz, Q. (2006). Anatomy of the Salafi movement. *Studies in Conflict and Terrorism*, 29, 207-239. Doi: 10.1080/10576100500497004

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