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## **Importance of psychological models to predict extreme forms of violence**

### **Introduction**

In February 2015 there was a mass murder in Uherský Brod, killing uninvolved and innocent people. An investigation of the case revealed questions about whether or not this tragedy could have been avoided. The issues related to predicting and preventing extreme forms of violence represent a living subject in current forensic psychology. 'Threat assessment', the name for this field of research, develops models of hazard prediction, for example, for grumblers, stalkers, domestic attackers or also for potential offenders of various types of multiple murders. In this paper, we will focus on verifying the prediction model of so-called 'personally motivated assassinations'. We will use the case of a mass murder in Uherský Brod. The author wants to determine and describe certain limits of forensic prediction, based on the analysis of this case. The paper therefore seeks to answer the question related to the practical significance of prediction models for the purpose preventing extreme violence.

### **Theoretical bases to assess threats**

At the beginning of March 2008, the first European conference on "threat assessment" was held in Luzern, Switzerland. The European Association of Professionals was established in the conference and aims to deal with the qualified prediction and prevention of serious forms of violence posing potential threat to others. Evaluation of threat (risk) related to violence is defined as a procedure allowing the possibility to assess whether or not the behaviour of a particular individual will be further increased to the extent which constitutes a security risk to the environment (Borum et al. 1999; Hoffmann 2003; Füllgrabe 2001; Rettenberger & Von Franqué 2013). Furthermore, the prediction and prevention of violence in the modern form represents an interdisciplinary approach in which the knowledge and theories of various scientific disciplines are interconnected. In addition to forensic and clinical psychology and criminology, other disciplines are also involved, such as linguistics, cultural anthropology and sociology. The basic premises which today's prediction and prevention of violence are based on polemics with common myths related to the dynamics of human aggression (Čírtková 2008).

- People are divided into decent individuals and dangerous individuals. People are classified either in the first or the second group. In fact, violence is a continuous continuum. It is strongly related to life events. In the course of life, a conformable and decent individual may become a dangerous person.
- People attack out of the blue, suddenly and surprisingly. Targeted violence is not preceded by any warning signals. In fact, the targeted violence is a process

underway. Before a serious attack occurs, a potential offender passes through various stages in which he/she shows typical warning signs. However, the verbal and behaviour signs are underestimated.

- A targeted and prepared violent incident cannot be avoided. Targeted violence can be avoided, provided that society takes step to ensure the prediction and prevention of violence and uses interconnected services.
- There is a specific profile of a dangerous person. In fact, it is not just about the psychological profile of a threatening person. Analysis of communication and behaviour is much more important. It is possible deduce whether the person in question set out on a path to targeted violence.

Experts believe that prediction and prevention are possible in those forms of violence which show signs of *intentional, intended and targeted aggression* (Calhoun & Weston 2003; Hoffmann 2007; Meloy et al. 2011). Intentional and targeted aggression is described as the result of certain mental processes and behaviour of a future offender. Serious violence, such as violence against a former employer, school, courthouse, doctor or non-participating random persons, is usually the product of interaction between:

- the potential attacker (his/her personality),
- stressful or traumatic events in the past,
- the current situation,
- and the target (future victim).

When the final act of brutal violence occurs, the bystanders and the general public are often surprised. Experts in the prediction of violence, however, believe that some recordable process will have taken place before. In literature, it is referred to as the “path to the intentional targeted attack on selected targets” (Calhoun & Weston 2003, 2006, 2009; Meloy et al. 2011). According to Calhoun and Weston (2003), the gradual growth of aggression up to the final attack involves certain stages, as outlined in the following.

### **1. stage of indignation**

A prospective offender participates in conflict and, in the context of its resolution, he/she feels harmed by the decision of a person or an institution. The decision taken in the conflict matter significantly and negatively affects his/her working and private life; it can also cause noticeable damage to his/her social prestige or deterioration in his/her financial situation. It can result in family breakdown and loss of friends. However, the stage of indignation may also be induced by an occupational accident, the result of which may result in the prospective offender having to give up his/her way of life.

### **2. stage of violent ideas**

The prospective offender feels he/she has already tried everything, but to no avail. From his/her perspective, the difficult problems can only be solved by violence. He/she feels unjustly harmed, circumvented and ignored. In his/her mind, the possibility of an amicable and non-violent solution is no longer an option. He/she sees no alternatives; he/she begins to think about revenge.

### **3. stage of searching and planning**

The prospective offender looks for ways to implement his/her violent ideas and thinks about them. At this stage, some offenders may monitor the activities of a potential victim or security modes of an institution or workplace.

### **4. stage of preparation for action**

At this stage, for example, the offender acquires a weapon or prepares an explosive. It is, therefore, about particular and observable activities with which the potential attacker becomes capable of actually carrying out the planned action.

### **5. stage of testing (probing) and violation of rules**

Just before the final action, non-compliance with rules, conventions and promises are apparent on the side of the potential offender. He/she violates occupational discipline, fails to respect agreements to which he/she was committed, etc. There is also noticeable social isolation; an individual “fades” from social relationships.

### **6. stage of attack**

An offender has internally accepted the consequences of his/her action. He/she is ready to carry them out. In his/her screenplay, he/she has already decided to perform a particular event, which might include escaping from the crime scene, suicide or “suicide by a cop” (it means that he/she expects to be shot dead by the police).

The described model is referred to as “Pathway to targeted or intended violence” and is currently a key starting point for the prediction and prevention of violence (Borum et al. 1999; Calhoun & Weston 2003; Meloy et al. 2011). According to theory, we can encounter various deviations or modifications of the general model, while in a living case. If offender proceeds from the starting point upwards, it means an escalation and increasing probability of physical attack. Some typical risk signals are derived from the model. These sets of risk factors are included in manuals related to prediction of violence. For example, there is the list of 21 risk items (WAVR 21 Risk Factor Items) for workplace violence committed by former or current employees against their companies. In addition to more general factors, such as violent imaginations, conflicting interactions and explicit threats, it also includes specific factors, such as extreme job attachment, tendency to verbally abuse colleagues at the workplace and shift blame to them.

During assessment of threat, risk factors and the so-called stabilisers are in opposite positions (Füllgrabe 2001; Rettenberger & Von Franqué 2013; Bannenberg 2014). The stabilisers represent circumstances and factors which act as a “bumper”. This means they can capture and suppress the impact of conflicts and traumas which start the path towards violence or dampen the transition from one stage to another. The stabilisers include:

- existence of persons whom the potential attacker trusts,
- preserving at least one of the supporting life points.

The *supporting life points* must be analysed from the point of view of the prospective offender. In general, maintaining a permanent job, sufficient financial resources, acceptable accommodation and contacts with close people may be considered as supporting life points.

## **Approaches to risk prediction for personally motivated assassinations**

Personally motivated assassinations are characterised by killing or injuring more people. As a matter of statistics, these events are extraordinary; however, they shake people by their impact. Therefore, they draw the attention of security experts and they encourage the question of how to timely identify persons who are decided and willing to perform such acts of violence (Bannenberg 2014; Endrass et al. 2015; Diehl 2014; Sadowski et al. 2017). The prototype of extreme aggression can be the young man's amok at the Olympia Shopping Center in Munich in July 2016, or the mass murder in Uherský Brod in 2015. Actions of this nature are commonly referred to as massacres. Professional literature has not yet concluded any common terminology. In the international context, there are English expressions such as mass murder (masové vraždy), multiple murder (mnohočetné vraždy), school shooting (střelení ve školách), murder-suicide (vražda s následující sebevraždou), homicide (homicida), extreme killing (extrémní zabíjení) and rampage (vražedné běsnění).

The term "run amok" was established in German-speaking countries. The word itself is originated in Malaysia; its original definition (e.g. unintended murderous rage in a state of trance or altered consciousness) does not fit with the actions classified nowadays. However, the media are quick to term incomprehensible multiple murders as "amok" or an action of a "crazy shooter". Thus, run amok take on a new meaning and it is also commonly used in professional literature, although with some critical reservations (Knecht 1999; Čírtková 2016).

Even the German police have taken over and uses the term amok. It is based on the preparatory definition, which takes "amok" to refer to actions in which one or more offenders attempt to assassinate as many people, in as short a space of time, as possible (Bannenberg 2014).

In the Czech Republic, the police use the term "active shooter", or an "active attacker", to carry a similar meaning.

On the other hand, Endrass (2014) and his team prefer the term "personally motivated assassinations", considering it as a synonym for the word "amok". It is based on the fact that the assassinations are motivated by the following factors:

- worldwide opinions / politics, or
- religion, or
- personal factors (privately, individually).

Assassinations motivated by worldwide opinions or religion are classified into the issue of extremism and terrorism (Dalgaard-Nielsen 2010; Bannenberg 2014). Personally motivated assassinations are usually associated with "family erasure" cases. However, this is a simplifying idea. Even in personally motivated assassinations, massive violence can be directed against unintended and random victims who are misused by an offender to fulfil his/her fantasies of grandiosity and to gain media attention. The mass murder in Uherský Brod may be taken as an illustration of this.

In the current review study, the team associated with Gilda Giebel (2014) analysed psychopathological symptoms in offenders with amok or in personally

motivated assassinations. The team found out that only a minority of them could be considered mentally ill. Only about 20% of the perpetrators of personally motivated assassinations suffer from a serious mental disorder. Taking this group, it is assumed that there is a close link between a danger-type and mental disorder - and thus an early psychiatric intervention can reduce the risk of using extreme violence. In other words, psychiatric care and treatment would also be preventive in such cases.

However, a substantially larger part of the perpetrators of personally motivated assassinations is represented by persons with whom it is either not clear whether they were mentally ill, or they simply did not meet the criteria for diagnosing official mental disorders. In this larger group, it is impossible, therefore, to derive the rates of danger according to psychiatric disorder. If we transfer the empirical findings to the issue of prediction of hazards, a clear conclusion follows: psychiatric stress covers only a few of the risk factors and it does not affect the complex risk potential in any way (Hoffmann 2003; Fast 2009; Gieble et al 2014; Sadowski 2017).

Why are mental disorders and psychiatric diagnoses not entirely sufficient when assessing a person's danger? This question can be answered quite simply, using reference to empirical studies which confirm the relevance of other risk factors, mainly certain personality characteristics. To ensure clarity of the situation, it is worth recalling how psychiatric diagnoses arise. Psychopathological eccentricities are sorted and classified in two main diagnostic systems, i.e. ICD 10 and DMS-V; the systems can be simply depicted as the lists of official psychiatric disorders. A diagnosis is always determined by the minimum number of symptoms which should be present and also by their duration. From a psychological point of view, however, only one symptom may signal danger of an individual (for example, impulsivity); e.g. the symptom which itself does not have any proper diagnostic significance. Danger can also be associated with symptoms which are not included in the diagnostic manuals. Cannon and his team (2007) documented, for example, the risk potential for the following elements of mind:

- prejudices, beliefs, belief systems with strong component of violence,
- extremist attitudes,
- pessimistic implicit theories related to the world.

The fact that the perpetrators are not mentally ill, however, cannot show that they are healthy or dangerous within the meaning of the definition of health given by the World Health Organization, 2005. A major part of the threatening persons is located in the interspace on the continuum between health and disability, according to diagnostic manuals. Corresponding risk factors are then defined or operationalized as *personality-based eccentricity* (Giebel et al. 2014) Above all, the researchers repeatedly indicate the following hazard signs:

- social eccentricity, e.g. lonely people, losers, outsiders,
- escape into a fantasy world, like for instance PCs, books, movies, etc.
- perception of a victim, mainly victim of mobbing.

However, consideration of these characteristics should be exercised with caution. General criteria are not very functional. They are empirically authenticated eccentricities of the assassins, but none of them is present in all offenders and none of them clearly *differentiates* them from non-violent citizens. Profiles of perpetrators of extreme violence are heterogeneous. After all, the presence of mental disorders

involving a paranoid and narcissistic nature does not necessarily mean an increased risk of massive violence in the public sector.

This difficulty is being solved by modern predictive tools arising in the field of forensic psychology through multidimensional models. Current predictive models combine both the stable signs of personality and the dynamic criteria derived from observable behaviour and the current life situation of a potential threat person (Sadowski et al. 2017; Hoffmann 2010).

The outline of premises show the model of prediction for personally motivated assassinations of the Swiss team of experts (Endrass et al. 2014). The authors propose analysing the following four basic dimensions in the assessment of the risk of extreme violence:

- **psychiatric eccentricity of an individual** (such as paranoia, tendency to delusional thinking, persistent thoughts of death, serious mental disorder),
- **unfavourable personality characteristics** (high vulnerability and sensitivity to one's personality, vulnerability to feelings of injustice, low commitment to norms and laws, prolonged feelings of emotions (especially anger and hostility), idolisation of violence, affinity to weapons, inclination to alienate and depersonalise certain people, keeping pictures of enemies, high level of self-esteem, social isolation associated with strange behaviour and inability to establish contacts, imagination of grandiosity),
- **situational stress** (increased conflicts with malignant dynamics, long-term cumulative stress and overload, loss of working or life perspectives, discontinuation of medication),
- **warning signs** (searching for liquidation devices and weapons, firearms training, explicit threats and other warnings, escaping from social ties and structures, searching for information about similar massacres and their perpetrators).

The outlined model describes factors and circumstances which should be considered in a particular, known individual. The risk of extreme violence is higher the more dimensions are found to be problematic, as the individual achieves positive results in them. However, authors recommend applying a *qualitative approach* to risk assessment. In other words, it is not just about presence or absence of a particular criterion; it is also about its intensity. The four-dimensional model is plastic, which means that it allows different combinations of risk factors. It also shows that in practice, we can encounter different types of offenders and different dynamics within their development.

## Case analysis of personally motivated mass-murder

Forensic models for assessing the so-called anthropogenic threat were tested in the retrospective psychological analysis of the mass murder case in Uherský Brod (hereinafter referred to as UB). In the **ex-post assessment** of the risk potential of a perpetrator, the above-described model focused on personally *motivated assassinations* was used (Endrass et al. 2014). The procedure is also referred to in professional literature as “**psychological autopsy**”, because it is the assessment of subjective aspect of the act of the now-already-dead perpetrator on the basis of relevant information collected and available after the event (Frei 2012). In this case,

the following sources of information were used to assess the personality and motivation of the offender:

- description of the course of the act,
- recording the offender's phone calls,
- witness statements related to personality and behaviour of the offender,
- statements of medical professionals (psychiatrist, practitioner),
- authentic documents of the offender, e.g. products of his/her mental activities (two stories, test for long-term marriages, letter for wife from psychiatric hospital, other documents in the workbooks and on pieces of paper),
- as well as documents of a close person.

General circumstances of a case can be traced back to public sources. At this point, we only summarise that the disputes and supposed hostile behaviour between the neighbours took place over approximately 14 years. On a critical day before noon, the offender allegedly told his wife that he was going to the town centre to arrange something. According to the neighbourhood, the offender was a real pedant (he obsessed over his car, for instance); he liked high-quality and new things; he felt like someone special, he was intelligent (played chess). He decided to leave his job and entered retirement. He was "more nervous" at the time before the event because no authorities wanted to deal with the disputes between the neighbours. For the last 5 years, he lived with his wife in very closed situation. They did not even contact the closest family members. Just before the event, the offender allegedly underwent a psychiatric examination for the first time in his life; he doubted about the outcome of this examination. The reason for the examination was that he had applied to extend his licence to possess a firearm.

We now present basic facts about the course of action. The attacker was armed with legally-held short fire weapons. He left by car and parked in the car park next to the Družba restaurant. He entered the restaurant at about 12:35; then without any apparent cause (conflict) and without any verbal communication, he immediately started to randomly shoot guests. With repeated shots, he aimed at people's heads and at the upper half of their abdomens. In total, he killed eight victims. He also hit another victim who had escaped from the restaurant. The attacker was shooting at other people who were trying to flee from the room. At about 13.00, he decided to call the crime line of TV Prima and the line 158. At the moment that the police entered the restaurant, the attacker committed suicide.

Case evaluation according to the prediction model for personally motivated assassinations (Endrass et al. 2014).

Dimension	EX POST evaluation
1. <b>psychiatric eccentricity</b>	<ul style="list-style-type: none"> <li>Primarily, feelings of being monitored for long time, combined with feelings of injustice (authorities ignore complaints)</li> <li>paranoid personality decompensation, progressive paranoid perception and paranoid delusional thinking</li> </ul>
2. <b>personality eccentricity</b> <ul style="list-style-type: none"> <li>high level of vulnerability / susceptibility to feelings of injustice</li> <li>low binding-level of standards / laws</li> </ul>	<p>+++</p> <p>no signals before the act; it is broken down by the feeling of helplessness; own concept of justice (accepting the "higher principle" according to the famous story / film)</p>
<ul style="list-style-type: none"> <li>prolonged perception of negative emotions / anger / hostility</li> <li>increased aggression / tendency to respond violently</li> <li>affinity to weapons</li> <li>tendency to alienate / depersonalise certain people - image of enemy</li> </ul>	<p>+++</p> <p>---</p> <p>+ (legal gun holder)</p> <p>++ (co-workers, neighbours, gradual generalisation of society)</p>
<ul style="list-style-type: none"> <li>high self-esteem</li> <li>imagination of grandiosity</li> <li>social isolation associated with strange behaviour and inability to establish contacts</li> </ul>	<p>+++</p> <p>+++</p> <p>+++</p>
3. <b>situational factors / stress</b> <ul style="list-style-type: none"> <li>current suicidality</li> <li>no more legal possibilities</li> <li>stress accumulation just before the action</li> <li>threats</li> </ul>	<p>+++</p> <p>+++</p> <p>+++</p> <p>alternatively: effort for promotion in the media, gaining public interest</p>
4. <b>warning signals</b> <ul style="list-style-type: none"> <li>explicit threats and other warnings</li> <li>escaping social ties and structures</li> <li>searching for information about similar massacres and their perpetrators</li> </ul>	<p>---</p> <p>+++</p> <p>no; alternatively the topic of "higher principle" in documents; court tribunals in short stories (literature)</p>

The table clearly shows that the offender would score in all dimensions of the model used. Absence of **symptoms** which are marked as "leaking" is remarkable in this case, e.g. **leaking of intentions of the potential offender** (explicit or implicit threats or talking about murderous intentions, apparent verbalisation of destructive fantasies, expressing sympathy for similar actions, physical aggression, etc.). It should also be emphasised that **imagination of grandiosity**, which in all prediction models ranks to indicators of **high risk of violence**, was explicitly included in autobiographical fictitious stories in literature. However, these were found **ex post** in the bag the perpetrator brought to the crime scene. The author describes the life of a fictitious married couple, among others, as follows: *the people whom they knew*



quit greeting them, co-workers avoided them, the people whom they did not know almost spat on them. Mr. Adam was working; however, he was treated like a scratchy dog. Then one of ten thousand interventions began to broadcast the stories of spouses. In this way, they completely blamed Adam and Eve. Adam was fired without any explanation. And although he did very well in his branch, he could not find any employment due to gossip. In particular, people with a low IQ were really “enthusiastic” ... there began an unusual and unique attack on two people in the history of mankind ... The author further develops the theme of trial over alleged offenders and sinners, which is conceived as a **grandiose final inscenation** (international courtroom, five judges – each of different nationality – assistance by the military peacekeeping service, trying to awaken people).

Bannenberg (2011) has developed a simple benchmark inventory in the form of questions to identify the level of risk. Her “**CHECK LIST for risk persons**” does not require direct psychiatric or psychological training for a user. It includes 11 comprehensible items. It should be used as the first benchmark estimation of the risk of massive violence which can also be utilised by practitioners.

No.	Item (RP = risk person)	UB evaluation
1.	Are there any symptoms / signals indicating a disorder of a psychotic type (persecution delusion) in RP?	Yes
2.	Is RP rather reluctant to abide by laws and standards?	? (own conception of truth, higher principle)
3.	Does the closest neighbourhood (family, school, workplace, neighbours) worry about the RP? Are they afraid of RP's attack?	Yes (just prior to the action there was a fear that he/she might inappropriately use a gun)
4.	Is RP sensitive to respect? Does the RP feel easily (narcissistically) offended, hurt?	Yes
5.	Does the RP have long-term presumptions in his/her mind to hold and grow anger? Do the RPs express hatred verbally or otherwise?	Yes (multiple submissions at authorities)
6.	Does the RP dehumanise certain specific people or a group of people?	Yes
7.	Are there any signals of increased aggressive potential in the RP? Has the RP already been punished for any criminal activity? Did the RP repeatedly participate in altercations, fights? Was the RP intensely interested in mass murders / amoks or suicides?	No; yes with a close person
8.	Are there any imaginations / fantasies of grandiosity recognisable?	detected ex post
9.	Are there signals about the RP's affinity for weapons?	Yes (holder of the firearms licence)
10.	Is there any worrying about RP threatening, indicating his/her intentions, giving warnings? (leaking)	?
11.	Are there any signals indicating latent or acute suicidality? Or did the RP attempt to commit suicide in the past?	signals detected ex post

Testing the current prediction tools on the mass murder case at the Družba restaurant in Uherský Brod (UB) clearly leads to the conclusion that the perpetrator was rated as a high-risk person. The vast majority of risk characteristics is present in the UB case. At the same time, however, it should be noted that the psychological autopsy makes the situation somewhat easier because we have information which was not known in real-time (before the action). This raises the question of the usefulness of prediction models for the actual *prevention* of personally-motivated assassinations in practice. In the following section, we will consider the practical significance and limits of the predictive models.

## **Discussion on prediction limits (extreme forms of violence) in forensic psychology**

Modern forensic-psychological prediction tools undoubtedly indicate progress in two respects. In particular, they have extended the hazard assessment by introducing further criteria. The original psychiatric approach, which logically emphasises only the point of view of mental disorders, was supplemented by further sources of risk, including those of a static nature (personality dispositions), or those of a dynamic nature (behavioural manifestations and the current situation of the offender). Secondly, current hazard forecasting is predominantly based on empirically verified risk factors derived from research and analyses of living cases. The original intuitive and clinical judgement of the assessor no longer plays such a significant role as before. The basis for hazard assessment was the Structured Professional Judgement (SPJ) method. Using the SPJ method, an expert proceeds in a structured way according to theoretically and practically verified risk factors. Using them, he/she searches, interprets and evaluates information about a particular case (Rettenberger & Von Franqué 2013; Sadowski et al. 2017).

Despite the progress described, it is necessary to evaluate possibilities of forensic-psychological approach to assessment and prediction of danger restrainedly and also in differentiated ways, with respect to the area of prediction. For example, situation is quite favourable in domestic violence and stalking. But how are these current prediction models useful for the factual prevention, specifically in the area of personally motivated assassinations? Analysis of the domestic case indicates some limits, as described below.

- ***availability of information necessary for risk assessment***

In the domestic case analysed, the attacker showed a triad of basic signals of risk: social eccentricity (he lived isolated from the environment and family), escape to the world of fantasies (he embodied his fantasies to almost sci-fi stories with distinctive autobiographical indicators) and perception of victim (he felt betrayed, ignored by the authorities which he often contacted with complaints about neighbours). According to the threat assessment theory, such findings indicate the necessity to intervene, especially in the form of seeking additional information. Adequate actions against the potential threat could then be taken in order to prevent negative development (therapy or other support). However, in the real-time before the crime event, critical information remained at various sites which were not interconnected. Social isolation was felt especially by the family and the environment (but not by healthcare professionals). The attacker completely concealed escape to the world of

fantasy thanks to isolation from people around; the persistent perception of feeling like a victim remained unnoticed as a result of absence of further information.

Real-time experience, therefore, indicates the fact that one of the limits of predictive models is the timely availability of information needed to assess a risk potential.

- ***availability of a specialised team of experts***

Early accessibility of information only makes sense if this information is concentrated in real time (before the action), in one place and is sufficient to assess the threat. In this respect, the limit for applying the new predictive tools in practice is also represented by availability of qualified specialised experts. Threat assessment in forensic psychology represents a specific area of knowledge which is not a part of common university studies for psychologists or advanced expert training. There is the question of whether it would be beneficial in domestic conditions to support emergence of a team of specialised experts which would function within a particular institution as a consultation centre for the needs of practice regarding various types of threats arising from an individual's manifestations. The author claims that there is a demand for such a place. After tragic cases (gas explosion in Frenštát pod Radhoštěm, Uherský Brod, student murder in Žďár nad Sázavou, etc.) comes a time of increased sensitivity of the general public. In this time there are greater demands on the police, authorities and individuals to carry out consultations about professional risk assessment of a person who makes the people around worried due to striking behaviour. In this context, it is also possible to refer to foreign countries where such teams of experts for assessing threats arising from behaviour of an individual already exist within the psychological service of the police.

- ***early detection of warning signals***

The description and classification of warning signals accelerating the likelihood of an outbreak of violence are dealt with by Meloy (2011) and his international team. Warning signals actually represent such manifestations of behaviour which excite fears of the individual, and thus evoke the need to deal with the situation. Their timely recognition and adequate response to them actually leads to a comprehensive risk assessment to be done by an expert. Thus, vague warning signals or their delayed resolution belong to natural limits of practical use of professional and psychological prediction. In the case of UB, the decisive warning signal was the worsening psychic condition of the attacker noticed by a close person. The change was intuitively evaluated as very serious, and thus the close person contacted the medical staff. Subsequently, standard activity of healthcare professionals took place (psychiatric examination invitation); it was fully in line with the regulatory base. The exceptional nature of the situation was not recognised because other risk factors were not known to health care assistants. In the case of Uherský Brod, information about the presence of significant risk factors was obtained ex post, which was partly caused by the extreme social isolation of the perpetrator from the environment and also the serious mental illness of the only one close person with whom he lived in the shared household. Hidden factors include, for example, suicidal thoughts which were discovered ex post in the attacker's letter (the letter said that if a man loses honour and dignity, he is not allowed to live further - and the writer experienced it).

- ***occurrence of atypical, exceptional circumstances***

Prediction limits also include the individual character of a particular case. Every personally motivated assassination (amok) contains individual peculiarities or unique aspects. For this reason, prediction models which arise within the field of threat assessment require a qualitative and creative approach to assess the risk factors. This was proved by the case of Uherský Brod too. An atypical circumstance was represented by the coexistence of two mentally ill persons. Both close persons shared a paranoid perception of the world. They also shared the common strategy of resolving things, by breaking contact with their family and wider environment, social withdrawal and closure into one's own world. Long-term social isolation therefore facilitated coexistence of the "folie a deux" type, which is a rare risk factor not mentioned in the prediction models. It should be added that each person suffered from a different mental disorder; aggressive behaviour apparent for the surroundings was manifested by the other person, not the later perpetrator. Physicians stated ex-post that the attacker never told - while visiting a doctor - that he had any psychological problems; he did not show any dangerous behaviour. Even the doctor did not observe any persuasive signs of a mental illness. The motives of tracking, monitoring, injustice, penetration of enemies into privacy (intertelevision broadcast perverse entertainment about their lives) appear in the paper documents which the perpetrator left behind in the bag at the scene of the crime.

- ***probabilistic conclusions of prediction in forensic psychology***

At least marginally, it is necessary to mention the general limits of hazard forecasting in forensic psychology. Human behaviour is, in principle, probabilistic (open, complexly conditioned, organised according to the principles of chaos theory), and thus it is predictable to a certain extent. While predicting potential violence, it is therefore not about predicting a particular action (when, where and how it happens); it is a qualified, expert determination of risks arising from the perpetrator. The outcome is represented by probability assessments related to level of risk. The probability nature of the outputs is the reason why the critics dispute the psychological forecasts of individual dangers, from ideological positions with reference to the interests of society. They claim that it is not possible to limit someone for something he/she has not done yet. There is an ideological (opinion-based) conflict behind these disputes, the conflict between so-called protectionists advocating the principle of "in dubio pro Securitate" and antiprotectionists who hold the principle of "in dubio pro libertate" (see, for example, Čírtková 2013). However, the pressure on security preference is currently very strong; forensic psychological studies of prediction and prevention of threats arising from behaviour of a particular individual are triggered. This also resulted in improvements of procedures for assessing the risk potential to violence and thus for specification of forecasts. The original intuitive and purely clinical (psychiatric) assessment was replaced by the new approach, which relies on the so-called structured professional judgement (SPJ).

- ***prediction and prevention***

Prediction of the risk potential (danger) of a person is not self-serving. Description of a specific constellation of risk factors and their saturation rate creates a certain profile of a person assessed. Then the proposal for "case management" shall follow. Proposals for solutions can range on a wide continuum from the level "noaction

required”, through informal measures (increased supervision of family members), up to social supporting and therapeutic measures or repression (criminal steps). Ex-post analysis of real cases can be beneficial for prevention as it brings further experience and reveals potential weaknesses. Illustratively, we will mention the outcomes of the psychological anatomy of the perpetrator of Uherský Brod within the field of prevention. Analysis of this particular case highlighted the critical point that there is a need to pay special attention to weapon holders who are reasonably suspected of serious mental health problems. A **combination of the following factors** can be considered as risky for holders of a firearms licence:

- suspicion of serious mental disorder,
- long-term social exclusion and almost total isolation of a potentially dangerous person from the environment,
- blocked collaboration of a potentially dangerous person or family member with health care professionals (psychiatrists),
- common standards distorting the environment or noticeable behaviour bringing concerns in the area.

With the occurrence of all the listed factors, it is appropriate firstly to deal with adequate prevention of explosion of violence; then later to implement the standard steps to verify medical fitness for the firearms licence.

## Conclusion

Personally motivated assassinations, as well as other forms of extreme violence, are dealt with by many branches of investigation. Processes of “re-tuning” of the psyche and personality which release the deliberate, intentional manifestations of extreme aggression are also intensively studied from the point of view of psychology. Demand of early identification of people with high-risk potential for violence is in the forefront of psychology interest. From a methodological point of view, current approaches are based on structured professional judgement. In practice, this means that an expert applies inventories (models, assemblies) of risk factors on a case being assessed; the factors shall be validated by relevant theories and studies. In this thesis, we tested the model of risk factors for personally motivated assassinations in consideration of the specific case of mass murder committed in 2015 in the Czech Republic. At the same time, we highlighted some limitations of prediction and, in particular, prevention of these tragic events in practice. Despite their limits, predictive models based on structured professional judgement are justified. Under ideal circumstances, they can help to avert the threat of intentional and targeted aggression.

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## RESUMÉ

Forenzní psychologie se v poslední době intenzivně zabývá „disciplínou“, která se etabluje pod označením threat assessment, tj. vyhodnocování hrozby. Zaměřuje se přitom na hrozbu extrémního násilí, které může plynout z konkrétního člověka. V této souvislosti vznikají modely predikce nebezpečnosti např. pro kverulanty, stalkery, domácí násilníky anebo potenciální pachatele různých typů vícečetných vražd. Příspěvek se zaměřuje na testování modelu predikce tzv. osobně motivovaných atentátů s využitím případu masové vraždy z domácího prostředí. Na základě analýzy tohoto případu vymezuje některé limity predikce risk assessmentu ve forenzní psychologii. Příspěvek hledá odpověď na otázku po praktickém významu predikčních modelů pro prevenci extrémního násilí.

## SUMMARY

Forensic psychology has recently been intensively engaged in the discipline which is identified as threat assessment. It is aimed at the threat of extreme violence which may arise from a particular person. In this context, there are models of hazard prediction, for example, for grumblers, stalkers, domestic attackers or also potential offenders of various types of multiple murders. The thesis focuses on testing the model of prediction of so-called personally motivated assassinations using the case of mass murder from the domestic environment. Based on the analysis of this case, it defines some limits of the prediction of risk assessment in forensic psychology. The thesis therefore aims to address the question of the practical significance of prediction models for the purpose of preventing extreme violence.

