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# Editorial

This issue of the Journal of Criminal Justice and Security consists of six quite diverse scientific analyses of important aspects of the field of criminal justice. In-depth studies in the areas of criminal investigation, policing, preventing radicalization, and corporate security are presented.

In the first paper **Avdi S. Avdija** in an article entitled *Police Response* to Homicide Crime Scenes: Testing the Effect of the Number of Police Officers and Investigators Responding to an Active Crime Scene on the Arrest Success Rate discusses the effects that the first responders (police officers and investigators) have on the arrest success rates at homicide crime scenes.

In the second paper **Iza Kokoravec** and **Danijela Frangež** in the article *The POIPAT Method and Its Usefulness in Cold-Case Investigations* presents a SWOT analysis of the method, that is mostly used in cold homicide cases to assist investigators eliminate suspects by evaluating and arranging them on levels of importance.

In the third paper *Police Visibility as an Influencing Factor on Citizens' Perception of Safety* **Krunoslav Borovec, Iva Balgač** and **Irena Cajner Mraović** presents the results of the study aiming to determine to what extent tactics based on police visibility can influence Croatian citizens' subjective perception of safety in their local environment.

Branko Lobnikar, Irena Cajner Mraović and Kaja Prislan in next article *Preventing Radicalisation and Extremism – The Views of Police Students in Croatia* presents approaches and strategies to preventing radicalisation in Croatia. Authors evaluate whether, using a proposed training design, it is possible to strengthen the notion of institutional interdependence in police officers' efforts in disengagement from radicalisation.

The fifth paper is the work of **Jelena Pavičić Vukičević**, **Marko Prpić** and **Matea Korda**. In the paper entitled *The Police Perception of the Role of School in Preventing Radicalization: The Case of Croatia* authors explore whether and how educational institutions can be involved in the process of the prevention of extremism and radicalization.

The last paper in this issue *Corporate Intelligence as the New Reality: The Necessity of Corporate Security in Modern Global Business* authored by **Miha Dvojmoč** present the key concepts of corporate intelligence such as competitive intelligence, sources and types of data collection and phases of the competitive intelligence process.

The editorial board at the Journal of Criminal Justice and Security trust you find the articles worth reading and a good source of fresh ideas for both your future research and hopefully new papers.

Prof. Branko Lobnikar, PhD Editor of English Issues

# **Uvodnik**

Druga številka revije Varstvoslovje v branje prinaša šest raznovrstnih znanstvenih razprav s področja kriminalistike, policijske dejavnosti, preprečevanja radikalizacije ter korporativne varnosti.

V prvem prispevku Police response to homicide crime scenes Avdi S. Avdija analizira vpliv števila prvih posredovalcev (policistov in kriminalistov) na uspešnost preiskanosti kaznivega dejanja umora. Iza Kokoravec in Danijela Frangež v prispevku The POIPAT method and its usefulness in cold-case investigations predstavljata SWOT analizo metode POIPAT in prikažeta njeno uporabnost pri eliminaciji osumljencev pri preiskovanju nerešenih umorov. Krunoslav Borovec, Iva Balgač in Irena Cajner Mraović v prispevku Police visibility as an influencing factor on citizens' perception of safety predstavljajo rezultate študije, v kateri so želeli ugotoviti, v kolikšni meri lahko taktike, ki temeljijo na vidnosti oz. prisotnosti policije, vplivajo na enega od pomembnih segmentov varnosti, torej na subjektivni občutek varnosti državljanov. V prispevku Preventing radicalisation and extremism Branko Lobnikar, Irena Cajner Mraović in Kaja Prislan predstavljajo strategije za odvračanje posameznikov od radikalizacije ter predstavljajo rezultate študije vpliva usposabljanja policistov na krepitev zavedanja njihove soodvisnosti pri preprečevanju ali odvračanju od radikalizacije. V petem prispevku The police perception of the role of school in preventing radicalization: the case of Croatia Jelena Pavičić Vukičević, Marko Prpić ter Matea Korda analizirajo načine vključevanja izobraževalnih institucij v procese preprečevanja radikalizacije in ekstremizma ter predstavijo mnenje hrvaških policistov o tem. V zadnjem prispevku Corporate intelligence as the new reality: the necessity of corporate security in modern global business Miha Dvojmoč pojasnjuje uporabnost korporativne obveščevalne dejavnosti pri zagotavljanju korporativne varnosti. Avtor predstavi ključne koncepte korporativne obveščevalne dejavnosti.

V uredništvu upamo, da bodo prispevki za bralce zanimivi in poučni. Hkrati pa vse pisce vabimo, da nam rezultate svojih študij pošljejo v recenzijo, saj bomo do konca letošnjega leta pripravili še eno številko revije Varstvoslovje v angleškem jeziku.

Prof. dr. Branko Lobnikar Urednik številk v angleškem jeziku

# Police Response to Homicide Crime Scenes: Testing the Effect of the Number of Police Officers and Investigators Responding to an Active Crime Scene on the Arrest Success Rate

VARSTVOSLOVJE, Journal of Criminal Justice and Security, year 21 no. 2 pp. 101–114

# Avdi S. Avdija

#### Purpose:

The purpose of this study is to investigate the effects that the first responders (police officers and investigators) have on the arrest success rates at homicide crime scenes. It attempts to determine whether or not increasing the number of officers (e.g., first line responders), and investigators responding to a homicide crime scene increases the arrest success rate, which contributes on the overall homicide clearance rates.

# Design/Methods/Approach:

Using archived administrative data that were originally collected by the Phoenix Police Department, and sponsored by the United States Department of Justice, this study analyses 532 investigative reports. The types of cases analysed in this study are homicides crime scenes, which includes homicide victims and survivors.

# Findings:

The findings in this study show that for every additional officer added to the number of police officers responding to the crime scene the arrest success rates increased by 8%, and for every additional investigator added to this first response, the arrest success rates increased by 24%. The number of witnesses and victims present at the crime scene did not have a significant effect on the arrest success rate of homicide cases.

# Research Limitations/Implications:

This study is limited to examining the effects of the number of officers and investigators have on homicide clearance rates. It does not account for the limited departmental resources and their effects on the homicide arrest rates or clearance rates. Also, this study does not include factors that do not solely depend on the police response to homicide crime scenes (i.e., factors that the offenders have control over).

# **Practical Implications:**

The methods that police use to respond to and investigate homicide cases can determine the outcome of a case. Depending on how the police decide to respond, ultimately increase or decrease the effectiveness of making an arrest or salve a homicide case. An increase in the arrest rate, by definition, results in an increase in the clearance rate of homicide cases. Thus, the study findings touch base on the importance and the role of the number of first line responders and investigators have on homicide arrest success rates.

# Originality/Value:

This is the first study that has examined the effects of first responders on homicide arrest rates.

#### UDC: 343.98

**Keywords:** police, police response, investigation, arrest rates, homicides, clearance rates

Odziv policije na kaznivo dejanje umora: Testiranje vpliva števila policistov in kriminalistov, ki so se odzvali na storjeno kaznivo dejanje, na stopnjo uspešnosti odvzema prostosti

# Namen prispevka:

Namen študije je proučiti vpliv, ki ga imajo na stopnjo uspešnosti odvzema prostosti policisti in kriminalisti, ki se na kaznivo dejanje umora odzovejo prvi. Avtor poskuša ugotoviti, ali povečanje števila policistov in kriminalistov, ki se prvi odzovejo na kaznivo dejanje umora, poveča stopnjo uspešnosti odvzema prostosti, kar vpliva na stopnjo preiskanosti.

#### Metode:

V študiji so uporabljeni arhivirani administrativni podatki, ki jih je zbrala policija iz Phoenixa, njihovo uporabo pa je omogočilo Ministrstvo za pravosodje Združenih držav Amerike. V študijo je vključenih 532 preiskovalnih poročil kaznivih dejanj umorov in poskusov umorov.

# **Ugotovitve:**

Ugotovitve študije so pokazale, da se je z vsakim dodatnim policistom na kraju kaznivega dejanja stopnja uspešnosti odvzema prostosti storilcu povečala za 8 %, z vsakim dodatnim kriminalistom pa za 24 %. Število prič in žrtev na kraju kaznivega dejanja pa na stopnjo uspešnosti odvzema prostosti v primerih umora ni imelo vpliva.

# Omejitve raziskave:

Študija je omejena na proučevanje učinkov števila policistov in kriminalistov na stopnjo preiskanosti umorov. Študija ne upošteva omejenosti virov, s katerimi se sooča policija, in njihovega vpliva na uspešnost reševanja umorov in stopnjo odvzema prostosti. Študija prav tako ne vključuje dejavnikov, ki niso odvisni samo od odziva policije na storjeno kaznivo dejanje umora (npr. dejavnikov, nad katerimi imajo nadzor storilci).

# Praktična uporabnost:

Metode, ki jih policija uporablja pri odzivanju in preiskovanju umorov, lahko vplivajo na izid primera. Učinkovitost odvzema prostosti ali preiskovanja umora se bo povečala ali zmanjšala glede na odziv policije. Povečanje uspešnosti stopnje odvzema prostosti, pomeni tudi povečanje stopnje preiskanosti. Ugotovitve študije torej izpostavljajo pomembnost in vlogo števila policistov in kriminalistov, ki se prvi odzovejo na storjeno dejanje, na stopnjo uspešnosti odvzema prostosti v primerih umora.

# Izvirnost/pomembnost prispevka:

To je prva študija, ki je preučila učinke števila oseb, ki se prve odzovejo na storjeno kaznivo dejanje umora, na stopnjo uspešnosti odvzema prostosti.

#### UDK: 343.98

Ključne besede: policija, odziv policije, preiskovanje, stopnja odvzema prostosti, umori, stopnja preiskanosti

# 1 INTRODUCTION

# 1.1 Investigative Failures

Homicide investigations can fail for a number of reasons. On one hand, the most obvious reasons include the lack of police resources (Wellford & Cronin, 2000), less than adequate police response to crime scenes, improper treatment of the crime scenes (i.e., failure to prevent crime scene contamination), etc. Investigations also fail due to cognitive bias, probability errors, and investigator's overconfidence (Rossmo, 2008, 2006). On the other hand, there are factors beyond an investigator's control. Such factors include lack of solvability factors that do not solely depend on the police response (i.e., factors that the offenders have control over). Nonetheless, the biggest failure in the criminal investigation of cases is a failure to correct the known problems. Knowing that the same investigative methods or procedures produce the same failed outcome, and not addressing those known problems is a failure to recognize self-weaknesses. Sometimes, this problem is directly related to the resistance to change – due to fear of the unknown. From the perception point of view, confirmatory bias is among the most serious factors that need to be addressed. Confirmation bias is a type of selective thinking where an investigator is likely to search and notice only the evidence that confirms his theory while failing to assess the evidence that contradicts his conclusions (Rossmo, 2008). In essence, confirmation bias is a form of tunnel-vision, which is an investigative failure that could send a case as far as to a wrongful conviction of an innocent person (Bell, Clow, & Ricciardelli, 2008; Findley, 2012; McFarlane, 2008). This is oftentimes as a direct result of over-confidence that is built based on the un-reviewed/un-evaluated experience that comes from a specific mindset, not open to constructive criticism. Despite these influencing factors, people ask what can be done to improve success. The best way to approach this concern is to focus on changing what is changeable – to change things that are within reach. For homicide cases, adding more officers, better coordination between units, and fast responses to such incidents are usually within reach. The current study focuses on testing investigative elements that the police have control over. In this aspect, this study asks the question: what would happen if you increase the number of first responders (e.g., police officers and investigators) to an active homicide crime scene. Would it help improve the arrest rates in homicide cases? An improvement in arrest rates, in turn, contributes to an increase in the homicide clearance rates.

# 1.2 Solvability Factors

Without solvability factors, a homicide case is most likely to be declared a cold case. Solvability factors are bits of pieces of information that help solve cases. They are rank-ordered based on the importance and the relevance to the case. Those factors are further classified as solvability factors that the police/investigators have control over (i.e., how fast they respond to the crime scene, experienced first responders or investigators properly securing the crime scene, minimizing the contamination of the crime scene, effective communication between police units at the crime scene, etc.) and solvability factors that are beyond investigator's control (i.e., the presence of witnesses at the crime scene, time of crime occurrence and the location of the crime, both are controlled by the offender, the presence of physical evidence left at the crime scene, etc.). The higher the number of solvability factors, the higher the chance of solving a homicide case (Hirschy, 2003; Keppel & Weis, 1992). In their study, Wellford and Cronin (2000) identified about 51 significant solvability factors that were with great importance in solving homicide cases. Thirty-seven of those 51 solvability factors were factors that the police and investigators had control over (Wellford & Cronin, 2000). While the police cannot control factors that are beyond their reach, one important solvability factor that they can control is the time and distance between the police and the crime scene. Research shows that time and distance between the police and the crime scene both are significant factors in solving murder cases (Greenwood & Petersilia, 1975; Weis & Keppel, 1994). According to Wellford and Cronin (2000), the time notification that the first responding officers make to the homicide unit has a significant impact on the homicide clearance rate. This means that the quicker the response and coordination between the units, the higher the chance of solving a homicide case, which is a burden that falls on the police agency at the strategic level (Brookman, Maguire, & Maguire, 2018). On the other hand, an important factor that is beyond an investigator's control is the time of the homicide occurrence, which is controlled by the offender. According to Mouzos and Muller (2001), homicide cases that occurred between 6:00 pm to 6:00 am were less likely to be solved compared to cases that occurred during the day time (also see Alderden & Lavery, 2007). In addition, the number of victims and witnesses at the crime scene also affect the clearance rate in homicide cases. In this aspect, research shows that homicide cases involving only one victim had a higher failed solvability rate compared to homicides with multiple victims (Mouzos & Muller, 2001).

# 1.3 The Witness Factor

The presence of witnesses at the crime scene can significantly improve homicide clearance rates (Roberts, 2007; Wellford & Cronin, 1999). On the other hand, the absence of witnesses can bring to a halt the entire homicide investigation (Mouzos & Muller, 2001). However, the witness factor should be considered effective only if the police meet the response time by responding fast to a crime scene. Fast police response in homicide cases is correlated with the accuracy of the information they receive from witnesses. This means that as time goes by, an effective recollection of the event by the witnesses can degrade significantly. The longer it takes for the police to respond to the crime scene, the less accurate and clear the witness statement will be (Keppel & Weis, 1992). Needless to say, eyewitness identification, by nature, is flawed, misleading, and in many cases inaccurate (Megreya & Burton, 2008; Wells, Steblay, & Dysart, 2011). By definition, eyewitness identification is unreliable and the investigators should not rely too much on it in an attempt to increase the homicide clearance rates. Nonetheless, to reduce the inaccuracy of eyewitness information, it follows that the police should decrease the response time to crime scenes. That way, there will be fewer memory recall problems with the eyewitnesses.

# 1.4 Arrest Rates for Violent Crimes

The percentage of unsolved homicide cases in the United States is about 39.3% (Uniform Crime Reports, 2017). This is an alarming rate when considering the seriousness of this type of offense. Even more alarming is the percentage of unsolved rape cases (65.5%), robbery cases (70.3%), and aggravated assault cases, 46.7% (Uniform Crime Reports, 2017). To increase the arrest success rates for violent crimes, researchers suggest improving several factors; namely reducing administrative influences, broadening the information processing capabilities, improving the response time, and personnel coordination (i.e., first line responders coordinating with investigators). The first and most important factor that affects the arrest success and clearance rates is police response time. Research shows that fast police response to the crime scene helps preserve physical evidence that is found at the scene and, as discussed above, it helps prevents contamination of the crimes scene (Regoeczi, Jarvis, & Riedel, 2008; Richardson & Kosa, 2001), which in turn helps speed up the case. The second factor that is worthy of consideration in improving homicide clearance rates is the reduction of administrative influence on the investigator's work. In an attempt to increase the overall clearance rates, some police administrators put too much pressure on investigators, which in turn can lead to an increase in false confessions. This occurs when instigators inflate overall clearance rates by pressuring people to confess or admit crime involvement in other cases beyond the case at hand (Jarvis, Mancik, & Regoeczi, 2017; Kassin, 2008). By reducing administrative pressure, it follows that the clearance rate will

<sup>1</sup> The percentage of unsolved murder cases is being used in reference to cases that have not been cleared by arrest or exceptional means as reported by the FBI's Uniform Crime Report (2017).

be uncontaminated and healthy. The success rates should be measured in terms of quality and not in terms of the quantity of cases. Another related factor is information processing scope. Broadening the search in the process of collecting and analysing information helps develop new leads, which in turn affects the case clearance rates (Richardson & Kosa, 2001; Weisburd & Eck, 2004).

Arrest rates for violent crimes have a dual-role effect on society. Increasing arrest rates for violent crimes is usually manifested in a form of a deterrence effect. This means, when the punishment is swift, certain, and severe enough, fewer offenders are willing to engage in such criminal behaviours (Berk, Campbell, Klap, & Western, 1992; Levitt, 1998; Sherman & Berk, 1984). The second effect of an increase in arrest rate is manifested with an increase in citizen satisfaction with the police. When people know that their police force is effective, fear of crime goes down. Along this line, research shows that people are less afraid of criminal victimization when they are more satisfied with police work (Ratcliffe, Taniguchi, Groff, & Wood, 2011).

# 2 CURRENT STUDY

In an attempt to examine arrests rates in homicide cases, this study focuses on investigating the effect that the number of first responders (e.g., police officers and investigators) has on the arrest success rates made shortly after their arrival at the crime scene. The types of cases analysed in this study are homicides scenes, which includes homicide victims and survivors. The analyses are based on 532 investigative reports. This study attempts to examine the following effects:

- a. The effect that the number of first responders has on the arrest success rates made shortly after their arrival at the crime scene.
- b. What type of homicide cases (e.g., drug-related homicide cases, gang-related homicide cases, robbery-related homicide cases, etc.) produce a higher arrest rate made immediately upon arrival at the crime scene?
- For better results, this study controls for the effects of domestic violence cases.<sup>2</sup>

# 3 METHOD

#### 3.1 The Data

The analyses in this study are based on archived police administrative data that were originally collected by the Phoenix Police Department, and sponsored by the United States Department of Justice. This includes a total of 532 investigative reports of homicide cases in which victims were either killed or survived. The

<sup>2</sup> The domestic violence was used as a control variable because the results would be sewed if it was included/interpreted in the context of the outcome variable. In most instances, domestic violence cases have a known suspect which would inevitably result with an arrest later on, and the cases would not have been coded as "open." For this reason, domestic violence was listed as a control variable.

data were released to the public in 2011 by the Interuniversity Consortium for Political and Social Research (ICPSR). The victims that are represented in the administrative police reports ranged in age from less than a year old to 93 years old (M = 30.6, SD = 13.01). Most of the victims (68.6%) were less than 34 years of age. In terms of gender, 84% were males and 16% females. Additionally, most of the victims were whites (83.6%) and 16.4% non-whites. As a limitation to these data, it is worthy to note that this study does not include solvability factors that do not solely depend on the police response (i.e., factors that the offenders have control over). It focuses on testing investigative elements that the police have control over.

# 3.2 Dependent and Independent Variables

The dependent variable in this study is the arrest success rate made shortly after police arrival at the crime scene. Since the data in this study are administrative police reports, cases were coded with a final outcome of "arrest made at the crime scene either immediate or quick action arrest" or "open cases." The outcome variable includes both immediate arrests and quick action arrests combined into one. Immediate arrest cases are those in which the suspect is immediately identified and arrested - usually at the crime scene or within a few blocks of the crime scene. A quick action arrest, on the other hand, refers to police arrests in which the suspect is not immediately identified or the location of a suspect is not immediately obvious when investigators arrive at the crime scene. In comparison to the above two types of arrests, open cases are those cases that do not have a named suspect, or due to lack of solvability factors, they are more likely to go cold. To put this in a time frame context, open cases remain open for months or years, vs. cases that are immediately solved or within hours (are referred to as immediate arrest or quick action arrests). The dependent variable in this study is coded dichotomously with binary response categories (arrests are coded 1, open cases are coded 0). Thus, the final outcome was measured as a binary variable.

Table 1. Description of variables

Variables	Description	Min	Max	Mean	S.D.
Number of Victims	Continuous	1	10	1.41	1.02
Number of Witnesses	Continuous	0	31	4.56	4.31
Victim's Age	Measured in continuous years	93	30.60	13.01	
Victim's Gender	Male 84% (coded 1) Female 16% (coded 0)	.84	.367		
Victim's Race	White 83.6% (coded 1), Non-White 16.4% (coded 0)	0	1	.84	.370
Domestic Violence	11.7% Yes (coded 1) 88.3% No (coded 0)	0	1	.12	.321
Drug-Related Crime	17.7% Yes (coded 1) 82.3% No (coded 0)	0	1	.18	.382
Gang-Related Crime	9.6% Yes (coded 1) 90.4% No (coded 0)	0	1	.10	.295
Robbery-related Crime	15% Yes (coded 1) 85% No (coded 0)	0	1	.15	.358
Victim Killed/Injured	81.8% Yes (coded 1) 18.2% No (coded 0)	0	1	.82	.386
Number of Patrol Officers	Continuous	0	28	7.70	5.71
Number of Investigators	Continuous	1	17	5.25	2.34
Immediate/Quick Action Arrest	27.3% Arrests (coded 1) 53.9% Open (coded 0) 18.8% Others/missing (coded 99)	0	1	.34	.47

Note: *Min* stands for minimum value, *Max* for maximum value, *S.D.* stands for standard deviation value, and *Mean* stands for the arithmetic average.

The main independent variables, on the other hand, include the number of patrol officers responding to the crime scene, and the number of investigators. As shown in Table 1, both are continuous numerical variables. Other important variables that were included in the model are the different types of crime cases such as drug-related cases, gang-related cases, robbery cases, domestic violence cases, and murder cases in which the victim was either killed or injured. All of these variables were dichotomously coded, with Yes/No response categories. Control variables in this study are the victim's age, gender, race, the number of victims, and the number of witnesses present at the crime scene. It is worthy to note that domestic violence is also used as a control variable in this study. Furthermore, since the dependent variable was binary in nature, with only two outcomes, ranging from 0 to 1, Multiple Logistic Regression analysis was used to analyse the data. Logistic Regression is a binary regression that works best when the outcome is dichotomous in nature (Pallant, 2011).

The duties and responsibilities of police officers and investigators at the crime scene overlap significantly. Thus, for research purposes, it is a concern that there might be some issues with multicollinearity among these two predictors. Multicollinearity occurs "when two or more predictors contain much of the same information" (Leech, Barret, & Morgan, 2012, p. 107). Each predictor in the model needs to offer a unique contribution without reference to other predictors in the model. To address this concern, two types of statistical analyses were computed; namely, the correlation matrix and collinearity diagnostics. These analyses are presented in Table 2. The technicalities for evaluation multicollinearity are as follow: the threshold for the Variance Inflation Factor values (VIF) is 3. Anything above 3 is an indicator of multicollinearity issue with the correlates. Anything above 5 (with the corresponding tolerance value of .2 or less) is a serious indicator of multicollinearity issue with the correlates. The VIF of 10 (with the corresponding tolerance value of .1) is a definite indicator of multicollinearity (see Field, 2009; Pallant, 2011).

Person Correlation Matrix		Mean	S.D.	Collinearity Diagnostics			
vs.	Number of Patrol Officers			Tolerance Value	VIF Value		
Number of	.554***	5.25	2.34				
Investigators	.000			.616	1.623		

Table 2.
Assessing
multicollinearity between two
main predictors

Note: VIF stands for *Variance Inflation Factor* value. S.D. stands for *Standard Deviation* value. \*\*\* p < .001

The multicollinearity diagnostic analyses in Table 2 show that the two independent variables included in the model (see Tables 3 and 4) did not violate the assumption of multicollinearity. Even though the correlation matrix shows that these two variables were moderately correlated (r = .554, p < .001), the Tolerance Value (.616) and the Variance Inflation Factor value (VIF = 1.623) were within the normal range, substantially below the cut off values. This evidence shows that the number of police officers and the number of detectives/investigators responding to the crime scene, as two independent variables, explain enough independent and unique variance in the model.

#### 4 RESULTS

The first objective of this study is to examine the effects of the number of first responders (e.g., police officers and investigators) on the arrest success rates made shortly after their arrival at the crime scene. The second objective is to examine what type of crime cases (e.g., drug-related cases, gang-related cases, robbery-related cases, etc.) produce a higher arrest rate made immediately upon arrival at the crime scene? To address these two objectives, the Logistic Regression analyses are computed and presented in Tables 3 and 4. The main model in Table 3 contained twelve independent variables. The full model was statistically significant,  $\chi^2$  (12, N = 432) = 104.50, p < .001, and it explained about 30% (Nagelkerke R-squared)

of the variation in arrest success rates made shortly after police responded to the crime scenes. This explained variation is presented in the form of a proportional reduction in the absolute value of the log-likelihood. Additionally, this model correctly classified 75.7% of cases.

As shown in Table 3, only three variables made a unique and significant contribution to the mode; namely the number of patrol officers, the number of investigators, and domestic violence, a type of crime that is used as a control variable in this model. Of the two main predictors of arrest success rates, the number of investigators responding to the crime scene recorded an odds ratio of 1.243, p < .001, (95% CI: 1.094, 1.413), followed by the number of patrol officers responding to the crime scene, b = .077, p = 01, OR = 1.080 (95% CI: 1.024, 1.139). This indicates that the higher the number of investigators and patrol officers responding to a crime scene, regardless of the type of crime, the higher the chances of making an immediate arrest, controlling for all other variables in the model. For every additional officer added to the number of officers responding to the crime scene, the arrest rates increased by 8%. On the other hand, for every additional investigator added to the number of investigators responding to the crime scene, the arrest rates increased by 24%. Interestingly enough, the number of witnesses present at the crime scene, the number of victims, and victim's demographic characteristics (e.g., age, gender, and race) did not have a statistically significant effect on the arrest rates.

Table 3. Logistic Regression: predicting immediate/quick action arrest at the crime scene

				95% C.I. for EXP(B)			EXP(B)
Variables	В	S.E.	Wald	Sig.	Exp(B)	Lower	Upper
Number of Victims	.127	.237	.287	.592	1.135	.714	1.805
Number of Witnesses	.033	.037	.788	.375	1.033	.961	1.111
Victim's Age	.008	.009	.801	.371	1.008	.990	1.026
Victim's Gender	.152	.346	.192	.661	1.164	.591	2.293
Victim's Race	400	.322	1.544	.214	.670	.356	1.260
Domestic Violence	2.201	.391	31.755	.000	9.035	4.202	19.429
Drug-Related Crime	277	.337	.676	.411	.758	.391	1.468
Gang-Related Crime	748	.464	2.595	.107	.473	.190	1.176
Robbery-Related Crime	653	.376	3.015	.083	.520	.249	1.088
Victim Murdered/Injured	147	.455	.104	.747	.863	.354	2.108
Number of Patrol Officers	.077	.027	8.136	.004	1.080	1.024	1.139
Number of Investigators	.218	.065	11.083	.001	1.243	1.094	1.413
Constant	-2.796	.871	10.299	.001	.061		
(Cox & Snell) $R^2 = .215$	(Nagelkerke) $R^2$ = .298			(	Correct Clas	sification of Ca	ases 75.7%

Table 4 shows a more parsimonious model with only three variables. This model explains about 27% (Nagelkerke R-squared) of the variation in the arrest rates mate immediately after responding to the crime scenes. Again, this variation is presented in the form of a proportional reduction in the absolute value of the log-likelihood. Considering that this model has only three variables, the explanation power did not differ by much (27%) compared to the main model with twelve variables, which explained about 30% of the variation in the arrest rates. Thus, the three-variable model in Table 4 has a better goodness-of-fit.

						95% C.I. for EXP(B)	
Variables	В	S.E.	Wald	Sig.	Exp(B)	Lower	Upper
Domestic Violence	2.330	.363	41.110	.000	10.276	5.041	20.948
Number of Patrol Officers	.093	.023	15.733	.000	1.097	1.048	1.149
Number of Investigators	.184	.057	10.504	.001	1.202	1.076	1.344
Constant	-2.722	.314	75.115	.000	.066		
(Cox & Snell) $R^2$ = .196(Nagelkerke) $R^2$ = .272 Correct Classification of Cases 76.9%							

Logistic regression: Predicting immediate/ quick action arrest at the crime scene

Table 4.

Note: Domestic violence is a control variable in this model.

# 5 DISCUSSION

A significant percentage of both violent and non-violent crimes are never salved by the police because the police are unable to make an arrest. Some of these crimes remain unsolved due to lack of solvability factors (e.g., no eyewitnesses, no physical evidence, no known suspects, no leads, lack of police resources, etc.), while others remain unsolved due to investigative failures (Rossmo, 2008). According to the FBI's Uniform Crime Report (2017) data, the number of arrests for serious crimes (e.g., murder and non-negligent manslaughter, rape, robbery, aggravated assault, etc.) doesn't reach half of all actual crimes that occur. The UCR data show that in 2017 the total number of cleared cases by arrest or exceptional means for homicide and non-negligent manslaughter was slightly better than other types of crime, reaching 61.6%. The clearance rate for rape cases was 34.5%, and for robbery cases was even lower with only 29.7% of the cases. The overall clearance rate for all violent crimes (cleared by arrest or exceptional means) was 45.6% (Uniform Crime Report, 2017), which is very low considering the magnitude of these violent crimes. This is not unexpected because this percent of arrest clearance rates has been low continuously since 1997 (Riedel & Jarvis, 1999). This shows that an effective response to a crime scene is relatively important in the outcome of both making an immediate arrest and/or salving the case later through the follow-up investigative process. The relevancy of the current study is derived from the above facts in regards to the overall clearance rates made by arrest or exceptional means. While the current study has a limited explanation power in the arrest success rates, it points out to the importance of the number of officers and investigators responding to a crime scene as significant factors in arrest success rates for homicide cases.

From the data analysis in this study, the research findings are pretty straight forward. This study shows that for every additional officer added to the number of officers responding to a crime scene, the arrest success rates increase by 8%. On the other hand, for every additional investigator added to the number of investigators responding to the crime scene, the arrest success rate increases by 24%. This suggests that police effectiveness increases through a well-coordinated response to crime scenes. Furthermore, perhaps the most interesting findings that emerged in this study are the insignificant effects of the number of witnesses at the crime scene and the type of crime. The number of witnesses and victims at the crime scene did not help significantly increase the arrest success rates, nor did the type of crime. Both were unexpected findings because prior research shows that the number of eyewitnesses at the crime scene helps increase the clearance rates

for violent crimes (Mouzos & Muller, 2001; Wellford & Cronin, 2000). Also, both the presence of witnesses and victims at the crime scenes are considered valuable solvability factors in the follow-up investigation of those crimes.

Moreover, the current study shows that the type of crime was not statistically significant in predicting the arrest success rates in homicide cases. For example, drug-related homicides compared to gang-related homicides or robbery-related homicides did not significantly affect the arrest success rates. Since homicide clearance rate is affected by arrest or exceptional means, in the context of existing literature, these findings are only partially supported. Prior research shows that drug-related homicides were insignificant in terms of clearance rates (Puckett & Lundman, 2003). On the other hand, there is research that shows gang-related homicides are significantly related to the clearance rates (Alderden & Lavery, 2007). Roberts (2007) also found that both gang-related and drug-related homicides had a higher clearance rate. This shows that more research is needed to determine the causal effects of the types of homicide on arrest success rates and the clearance rates.

To help readers better understand the context of these research findings, it is noteworthy to discuss some of the limitations of the current study. One of the limitations of this study is that it does not account for the limited departmental resources and their effect on the homicide arrest rates or clearance rates, which could be significant and substantial. Second, this study does not include solvability factors that do not solely depend on the police response (i.e., factors that the offenders have control over). It focuses on testing investigative elements that the police have control over. Future research could address the above effects as well as other factors such as the effect of poor vs better coordination between police units on homicide arrest rates, and the effects of administrative influence on homicide investigators/detectives. When considering the above limitations, the research findings of the current study partially suggest the implementation of targeted policing - specifically by focusing on implementing directed patrol operations, which focus on high crime areas (e.g., hot spots). This helps reduce the police response time to homicide crime scenes without stretching out the department resources, which in turn helps increase the arrest success rates.

# REFERENCES

- Alderden, M. A., & Lavery, T. A. (2007). Predicting homicide clearances in Chicago: Investigating disparities in predictors across different types of homicide. *Homicide Studies*, 11(2), 115–132. doi:10.1177/1088767907300505
- Bell, J. G., Clow, K. A., & Ricciardelli, R. (2008). Causes of wrongful conviction: Looking at student knowledge. *Journal of Criminal Justice Education*, 19(1), 75–96. doi:10.1080/10511250801892979
- Berk, R. A., Campbell, A., Klap, R., & Western, B. (1992). The deterrent effect of arrest in incidents of domestic violence: A Bayesian analysis of four field experiments. *American Sociological Review*, *57*(5), 698–708. doi:10.2307/2095923
- Brookman, F., Maguire, E. R., & Maguire, M. (2018). What factors influence whether homicide cases are solved? Insights from qualitative research with detec-

- tives in Great Britain and the United States. *Homicide Studies*, 23(2), 145–174. doi:10.1177/1088767918793678
- Field, A. (2009). Discovering statistics using SPSS (3rd ed.). London: Sage.
- Findley, K. A. (2012). Tunnel vision. In B. L. Cutter (Ed.), *Conviction of the innocent: Lessons from psychological research* (pp. 303–323). Washington: American Psychological Association Press.
- Greenwood, P. W., & Petersilia, J. (1975). *The criminal investigation process. Vol. I: Summary and policy implications*. Washington: U.S. Department of Justice, National Institute of Justice.
- Hirschy, T. (2003). *Usual suspect: Do solvability factors predict case investigation outcomes for the Dublin*. Dublin: Ohio Division of Police.
- Jarvis, J. P., Mancik, A., & Regoeczi, W. C. (2017). Police responses to violent crime: Reconsidering the mobilization of law. *Criminal Justice Review*, 42(1), 5–25. doi:10.1177/0734016816684198
- Kassin, S. M. (2008). False confessions: Causes, consequences, and implications for reform. *Current Directions in Psychological Sciences*, 17(4), 249–253. doi:10.1111/j.1467-8721.2008.00584.x
- Keppel, R. D., & Weis, J. G. (1992). Improving the investigation of murder: An analysis of the effect of time and distance relationships in murder investigations. Washington: National Institute of Justice. Retrieved from https://www.ncjrs.gov/pdffiles1/Digitization/138620NCJRS.pdf
- Leech, N. L., Barret, K. C., & Morgan, G. A. (2012). SPSS for intermediate statistics: Use and interpretation (4th ed.). New York: Taylor & Francis.
- Levitt, S. D. (1998). Why do increased arrest rates appear to reduce crime: Deterrence, incapacitation, or measurement error? *Economic Inquiry*, 36(3), 353–372. doi:10.1111/j.1465-7295.1998.tb01720.x
- McFarlane, B. A. (2008). Wrongful convictions: The effect of tunnel vision and predisposing circumstances in the criminal justice system. Toronto: Government of Ontario.
- Megreya, A. M., & Burton, A. M. (2008). Matching faces to photographs: Poor performance in eyewitness memory (without the memory). *Journal of Experimental Psychology*, *14*(4), 364–372. doi:10.1037/a0013464
- Mouzos, J., & Muller, D. (2001). Solvability factors of homicide in Australia: An exploratory analysis. Canberra: Australian Institute of Criminology.
- Puckett, J. L., & Lundman, R. J. (2003). Factors affecting homicide clearances: Multivariate analysis of a more complete conceptual framework. *Journal of Research in Crime and Delinquency*, 40(2), 171–193. doi:10.1177/0022427803251125
- Pallant, J. (2011): SPSS: Survival manual (4th ed.). Crow's Nest: Allen & Unwin.
- Ratcliffe, J. H., Taniguchi, T., Groff, E. R., & Wood, J. (2011). The Philadelphia foot patrol experiment: A randomized controlled trial of police patrol effectiveness in violent crime hotspots. *Criminology*, 49(3), 795–831. doi:10.1111/j.1745-9125.2011.00240.x
- Regoeczi, W. C., Jarvis, J., & Riedel, M. (2008). Clearing murder: Is it about time? *Journal of Research in Crime and Delinquency*, 45(2), 142–162. doi:10.1177/0022427807313706

- Richardson, D. A., & Kosa, R. (2001). An examination of homicide rates: Foundation for development of homicide clearance model. Washington: Police Executive Research Forum. Retrieved from https://www.publicsafety.gc.ca/lbrr/archives/cnmcs-plcng/cn35337-eng.pdf
- Riedel, M., & Jarvis, J. (1999). The decline of arrest clearances for criminal homicide: Causes, correlates, and third parties. *Criminal Justice Policy Review*, 9(3), 279–306. doi:10.1177/088740349900900302
- Roberts, A. (2007). Predictors of homicide clearance by arrest: An event history analysis of NIBRS incidents. *Homicide Studies*, 11(2), 82–93. doi:10.1177/1088767907300748
- Rossmo, K. (2006). Criminal investigative failures: Avoiding the pitfalls. *FBI Law Enforcement Bulletin*, 75(9), 1–8. Retrieved from https://leb.fbi.gov/file-repository/archives/sept06leb.pdf/view
- Rossmo, K. (2008). Criminal investigative failures. Bocan Raton: CRC Press.
- Sherman, L. W., & Berk, R. A. (1984). The specific deterrent effects of arrest for domestic assault. *American Sociological Review*, 49(2), 261–272. doi:10.2307/2095575
- Uniform Crime Report. (2017). *Percent of offenses cleared by arrest or exceptional means by population group*, 2017. Washington: FBI. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/topic-pages/tables/table-25
- Weis, J. G., & Keppel, R. D. (1994). Time and distance as solvability factors in murder cases. *Journal of Forensic Science*, 39(2), 386–401. doi:10.1520/JFS13610J
- Weisburd, E. L., & Eck, J. E. (2004). What can the police do to reduce crime disorder, and fear? *The Annals of the American Academy of Political and Social Science*, 593(1), 42–65. doi:10.1177/0002716203262548
- Wellford, C., & Cronin, J. (1999). *An analysis of variables affecting the clearance of homicides: A multistate study*. Washington: Justice Research and Statistics Association. Retrieved from http://www.jrsa.org/pubs/reports/homicides\_report.pdf
- Wellford, C., & Cronin, J. (2000). Clearing up homicide clearance rates. *National Institute of Justice Journal*, (April), 1–7. Retrieved from https://www.ncjrs.gov/pdffiles1/jr000243b.pdf
- Wells, G. L., Steblay, N. K., & Dysart, J. E. (2011). A test of the simultaneous vs. sequential lineup methods: An initial report of the AJS national eyewitness identification field studies. Des Moines: American Judicature Society.

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# The POIPAT Method and Its Usefulness in Cold-Case Investigations

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# Iza Kokoravec, Danijela Frangež

# Purpose:

The purpose of this paper is to present an elimination method called the POIPAT and demonstrate its usefulness in eliminating suspects in cold-case investigations.

# Design/Methods/Approach:

The paper presents a SWOT analysis of the POIPAT method that considers the strengths, weaknesses, opportunities and threats connected to cold-case investigations.

# Findings:

The POIPAT is mostly used in cold homicide cases to, with the help of a compiled questionnaire, assist investigators eliminate suspects by evaluating and arranging them on levels of importance. The more points a suspect gathers, the more likely they are the perpetrator. The method's advantages include the effective use of resources, the focus on the most likely perpetrators, and the questionnaire's objectivity. The biggest deficiencies are possible subjectivity in determining the importance of the elements and lack of knowledge of the method, together with the use of a questionnaire that is not adapted to the Slovenian situation. While the method is promising and useful, it only holds heuristic value.

# Research Limitations/Implications:

The limitations mainly lie in the lack of literature that might facilitate a better SWOT analysis of POIPAT. In the future, it would be useful to perform a study to determine the cognitive value of the analysed POIPAT.

#### **Practical Implications:**

The paper's findings enable an insight into POIPAT's usefulness as one of the methods available for cold-case investigations.

# Originality/Value:

This paper is one of just a few to mention the POIPAT method. It is intended for anyone interested in this subject, with police officers and criminal investigators being particularly in mind.

#### UDC: 343.98

**Keywords:** cold cases, investigation, persons of interest priority assessment tool, POIPAT, profiling, SWOT analysis

# Metoda POIPAT in njena uporabnost pri preiskovanju nerešenih umorov

# Namen prispevka:

Namen prispevka je predstaviti metodo eliminacije POIPAT in prikazati njeno uporabnost pri eliminaciji osumljencev pri preiskovanju nerešenih umorov.

### Metode:

V prispevku je predstavljena SWOT analiza metode POIPAT. Analizirane so prednosti, slabosti, priložnosti in nevarnosti, povezane s preiskovanjem nerešenih umorov.

# **Ugotovitve:**

Metoda POIPAT, ki se večinoma uporablja pri nerešenih umorih, je metoda eliminacije, kjer preiskovalci s pomočjo sestavljenega vprašalnika točkujejo osumljence in jih razporejajo po stopnji pomembnosti. Osumljenec z najvišjim seštevkom točk je najverjetnejši storilec kaznivega dejanja. Prednosti metode so učinkovita uporaba sredstev, osredotočanje na najbolj verjetne storilce in objektivnost vprašalnika. Največje pomanjkljivosti pa možna subjektivnost pri določanju pomembnosti elementov in nepoznavanje metode ter neprilagojenost vprašalnika za slovenske razmere. Metoda je obetavna in uporabna, a ima le spoznavno vrednost.

# Omejitve/uporabnost raziskave:

Omejitve so predvsem v pomanjkanju literature, s pomočjo katere bi lahko naredili kvalitetnejšo SWOT analizo metode POIPAT. V prihodnje bi kazalo narediti raziskavo, s katero bi ugotavljali spoznavno vrednost te metode.

# Praktična uporabnost:

Ugotovitve prispevka omogočajo vpogled v uporabnost metode POIPAT kot ene izmed metod preiskovanja nerešenih umorov.

#### Izvirnost/pomembnost prispevka:

Prispevek je eden izmed redkih, ki obravnava metodo POIPAT. Namenjen je preiskovalcem nerešenih umorov in drugim, ki jih tovrstna tematika zanima.

#### UDK: 343.98

Ključne besede: nerešeni umori, preiskovanje, prioritetni seznam osumljencev, POIPAT, SWOT analiza

# 1 INTRODUCTION

Cold cases are situations where investigators have exhausted all their leads and have had no new directions for a long period of time (Heurich, 2009). The investigators therefore lack vital information about the case and the offender and his/her relationship with the victim/s (Quinet & Nunn, 2014). Common reasons for the occurrence of cold cases are the lack of evidence and resources, the shortage of time, mistakes made during the process, unfamiliarity with procedures, negligence, and an absence of knowledge (Maver, 2007; Pettem, 2013).

Cold-case investigations of homicides are subject to the availability of investigators, financial resources and especially possibilities concerning the discovery of new evidence. For example, 80 years after an act of homicide has been committed, there is a really minor possibility of investigators finding any new evidence mainly because the offender and possible witnesses have most likely already died (Hughes, 2015). The first 72 hours are quintessential in a homicide investigation, forcing investigators to work quickly and efficiently. On the other hand, time is on the investigators' side when investigating cold cases because many things can change over time. In some cases, physical evidence found at the crime scene at the time can only be analysed today due to advances made concerning DNA that can establish a burden of proof against a certain suspect (Stare, 1998). Relations can also change in time with former friends becoming enemies, witnesses no longer being in fear (perhaps the suspect has died, encouraging witnesses) and offenders can also start talking or bragging about an offence they committed (Regini, 1997). The victim's relatives have often still not given up and continue to apply pressure to the police and hire private detectives, which can often help in solving the case (Maver, 2012).

An investigation of a cold case that occurred several years ago requires precision from the investigators, another careful read through the case file, all of the photographic documentation, the autopsy report and photographs and interviews with the investigators who had been in charge of the case (Stare, 1998). They must acquire the maximum possible information about the victim/s, do a background check on all persons of interest who were in anyway connected to either the victim/s and the offender, contact the family of the victim/s and try to include them in the investigation and re-do the interviews with the key witnesses and eyewitnesses if they are still alive and can be contacted (Pettem, 2013). The investigators must also know the whereabouts of the suspects and if anything has happened in their life which might encourage any of the witnesses to talk (Schuster, 2008). It is necessary to check all unidentified fingerprints in a dactyloscopic database, look for traces of possible DNA, obtain DNA and fingerprints from the suspect and, if possible, see the crime scene. A revisit to the crime scene can give the investigators a better visual sense of the scene of the crime and the crime itself, even though the scene might look quite different due to the passing of time (Stare, 1998). The investigation's goal is to check all of the statements, compare them and determine whether any inconsistencies appear, check if any of the old evidence can be analysed with new methods, while simultaneously trying to find new evidence to successfully complete the investigation.

A crucial aspect investigators must focus on while investigating a cold case is the offender and every person involved in the case. In some cases, there are many suspects and investigators must know how to eliminate the most improbable ones and concentrate on those more likely to be the offender. This process is called the elimination or priority ranking of the suspects. Such ranking of suspects is a common practice in all areas of law enforcement and is undertaken by investigators and other personnel based on the available information and by applying their individual and collective experience and intuition (Phillips & Pohl, 2018). Many methods aim to help with the process. Snook, Wright, House, and

Alison (2006) describe how so as to identify offenders investigators typically focus on either behavioural information collected at crime scenes to produce a profile of an offender's likely characteristics, or crime locations to predict geographical areas that may contain an offender's residence. Homicide offender typologies tend to determine how crime-scene behaviours cluster along some psychological constructs and may provide valuable information for prioritising suspects (Adjorlolo & Chan, 2017).

The Royal Newfoundland Constabulary established a Criminal Behaviour Analysis Unit which provided an offender profiling service developed according to well-documented academic research which, by applying certain procedures, could analyse offender data and thereby provide investigators with a list of suspects in priority order (Adderley & Musgrove, 2001; Beek, Eshof, & Mali, 2010). Suspect ranking and prioritising is now used while investigating all sorts of offences. One example is a burglar prioritisation model (Goodwill & Alison, 2006), while another is a prioritisation tool for investigating indecent-image offenders KIRAT, which concentrates on evidence for suspect prioritisation by suspects' risk of committing contact offences against children (Long, Alison, Tejeiro, Hendricks, & Giles, 2016).

One method/technique that is useful in cold-case investigators is Behavioural Investigative Advice [BIA],<sup>2</sup> which may be seen as a modern term for offender profiling.3 BIA can aid an investigation by reducing the time spent on irrelevant suspicions and by providing an evidence-based approach for making investigative decisions (Alison et al., 2011). BIA products include the provision of advice relative to crime-scene assessment, predictive offender profiling, prioritisation of persons of interest, generating of hypotheses, and linking of offences (Cole & Brown, 2014). Always on the lookout for ways to reduce or eliminate the number of suspects in a SISC<sup>4</sup> case and a forensic system, investigators can automatically lower the number of suspects on their list and prioritise them by categorising attributes of the usual offenders in the database by use of multivariate statistical analysis (Taha & Yoo, 2018). Another technology in use today is Language Models that are successfully applied to the problem of analysing crime descriptions from a police database for the purpose of prioritising suspects for an unsolved crime, given details of solved crimes (Bache, Crestani, Canter, & Youngs, 2007). Yokota, Fujita, Watanabe, Yoshimoto, & Wachi (2007) developed a profiling system which stores information about offenders' previous offences. After inputting the details of an unsolved case, each previous offender found in the system receives a probability score and the system then ranks them based on the results and the prioritising of the highest-ranking offenders.

<sup>1</sup> The Kent internet risk assessment tool [KIRAT] is a risk prioritisation tool that applies to individuals suspected of possessing, making, taking and/or distributing indecent images of children (Long et al., 2016).

<sup>2</sup> Behavioural investigative advice [BIA] is offender profiling which includes decision support given to investigators (Alison, Goodwill, Almond, van den Heuvel, & Winter, 2011).

<sup>3</sup> Offender profiling is based on theories that are uncertain at best and little research has been made to assess the actual validity of the profiles (Chifflet, 2015). Investigators should be careful when considering whether the development and use of profiles, or the use of external consultants to provide such services, is justified (Devery, 2010).

<sup>4</sup> SISC – system for shortlisting suspects (Taha & Yoo, 2018).

A useful method for eliminating suspects that will be discussed below is the Persons of Interest Priority Assessment Tool [POIPAT] which points to the most probable suspects in a homicide case, encourages new ideas and directs the investigators (Wilson, 2012).

# 2 METHODS OF RESEARCH

In the period between 20 February and 10 May 2019, 12 databases (WOS, SAGE, Scopus, JStor, PsycARTICLES, Wiley Online Library, Scholar.google, UM:NIK, Cobib.si, Academic Search Complete, EMERALD and SpringerLink) were examined using 11 keywords,<sup>5</sup> to find references for the present paper. Besides Larry Wilson's book on the POIPAT (Wilson, 2012), we only found two documents which relate to the method. The first is a master's thesis mentioning the method that was found by Google Scholar. The second is an article that compares different suspect-elimination methods, including the POIPAT, which was found by Scholar. google and UM:NIK. The other publications we found (17)6 relate to similar methods and forms of research to the POIPAT, but do not mention the method. We also searched for other articles under the name Larry Wilson, but found nothing. Our database sweep allows us to speculate that the POIPAT is not an object of great interest from the point of view of publications but, because the analysis of the Slovenian case by Maver, Miklič, and Frangež (2013) shows the method is promising and useful, we intend to analyse it further in this article. We shall rely on insights arising from the so-called SWOT analysis, which usually focuses on the strengths, weaknesses, opportunities and threats within an organisation (Sammut-Bonnici & Galea, 2015), although in this article we shall use it to discover the strengths, weaknesses, opportunities and threats connected to the POIPAT and its usefulness for criminal investigations of cold homicide cases. The lack of relevant literature is the biggest limitation of the paper. Another limitation is that other important articles and research about the method were perhaps not found using the given keywords, but might be found while using different keywords.

#### 3 THE PERSONS OF INTEREST PRIORITY ASSESSMENT TOOL

The POIPAT method was established by the Canadian investigator and analyst Larry Wilson. He conceived of the method in 1992 in Ontario, Canada, where he had participated in a high-profile homicide case involving two teenagers when the investigators had a couple of thousand persons of interest [POIs]<sup>7</sup> because they had used multiple strategies in their investigation process. Due to a shortage of investigators, most of the POIs had been assigned to Wilson, who then created the

<sup>5</sup> Keywords included POIPAT, Larry Wilson, and different combinations of words: person, interest, prioritization, suspect, system, elimination, tool, profiling, large, number, assessment, ranking, and evaluation.

<sup>6</sup> The number of unique articles we found in all databases, without repetitions.

<sup>7</sup> Wilson (2012) describes persons of interest [POI] as "potential" suspects.

first trial system for ranking persons of interest. Through a background search, he collected information about each POI and arranged them, according to that information, on three priority levels 1–3, where level 1 contained POIs with high priority and level 3 those with the lowest priority. In October 2003, the KARE project<sup>8</sup> was formed to investigate various homicides of prostitutes in Alberta when the investigators encountered similar problems as in 1992 so the project members contacted Wilson who then created a method specifically designed for their situation. This method was eventually renamed the POIPAT, and allowed the KARE project to identify and evaluate hundreds of POIs in the following years (Wilson, 2012).

The POIPAT is a risk management system designed to utilise investigative resources (Maver et al., 2013). It is an objective system of assessing the probabilities of POIs and comprises a series of questions that are relevant to each individual investigation and are weighted based on how important they are for the investigation. Each POI is assessed based on answers given to the questions and points are awarded for all positive responses, where those POIs who have the highest final score and thus the highest priority have the greatest likelihood of being responsible for the offence. Since no investigation is ever the same, there is no universal questionnaire which can be applied to every case, explaining why a unique questionnaire should be created for each case in order for it to be effective. The same POIPAT could be used in multiple investigations when it is believed the same offender is responsible for the offences being investigated, e.g. a serial killer. Investigators must create a document for each POI in an investigation that contains the POI's background search, links to the victim/s, their characteristics and other relevant information, although it is noted that investigators do not always have access to all the necessary information regarding all suspects and this might affect the final scores. The questionnaire can be created by anyone who is part of the investigation, but the best person for formulating it is the one holding greatest knowledge of the case. When the information has been gathered and the questionnaire prepared, all of the POIs must be assessed, points assigned to them, their total scores calculated and then allocated to one of the three priority levels. The results and questionnaires should then be returned to the main investigator who diverts most of the attention and resources available for the investigation towards the most likely suspects (Wilson, 2012).

The method is used for the most serious offences, such as homicides and missing persons, when investigators encounter various POIs and must handle matters rationally and efficiently due to the limited time, material and human resources (D. Maver, interview, 22 August 2016). The POIPAT enables investigators to first focus on those POIs who are most likely to be the offenders, while also reminding them not to neglect other POIs and important data. Investigators must be careful to not only target the high priority POIs because their 'tunnel vision' might produce negative effects for the whole case (D. Maver, interview, 22 August 2016). Ranking POIs by priority is not new in homicide investigations because investigators involved in a case with multiple suspects have long decided which

<sup>8</sup> A project formed in October 2003 in Canada to investigate a series of homicides in Alberta. It is today a model which strives to minimise the risk of murder of vulnerable missing persons (Wilson, 2012).

suspects are the most probable offenders based on the evidence gathered and sometimes also their own intuition (Wilson, 2012). Such approaches may serve investigators well, but a problem can emerge in high-profile investigations when investigators encounter a large number of POIs that make the establishing of a priority ranking more difficult (Wilson, 2012). This may be especially crucial in cold cases where a fresh insight is essential. The POIPAT can benefit cold-case investigations by gathering new ideas, perspectives and discussions about the case (Maver et al., 2013).

# 4 CONSTRUCTION RULES FOR THE POIPAT ELEMENTS

The POIPAT method requires that a questionnaire containing questions referring to the offender in the case is created. The person responsible for formulating it and those who then complete it must correctly follow certain rules and guidelines. Since all investigations are unique, every POIPAT should also be unique and reflect the special elements of the investigation. It is very important that, when investigators re-open a cold case, they take another look through all of the suspects and POIs and perhaps identify new POIs. They must then carefully examine the background of each POI and recognise elements which may suggest the person committed the offence. It is vital that the person designing the questionnaire adheres to the following main principles and rules (Wilson, 2012):

#### 1. Inferences

Investigators usually do not know the offender's identity when investigating a homicide case and must therefore draw conclusions about the offender based on inferences. Inferences are simply 'educated guesses' and can range from weak to strong. An example of a weak inference is that the offender is 'a night owl' since the victims were murdered at night, while an example of a strong inference is that the offender has access to a specific type of vehicle because investigators found traces of that type of vehicle at the crime scene.

#### 2. Source and number of elements

When choosing which elements to include in the POIPAT questionnaire, the designer must first consult all members of the investigative team. The questionnaire needs to have a limited number of elements because each element requires investigators to run a background check on all the POIs. This is especially significant when there are many suspects. The number of elements should be around 30 or less, and completion of the questionnaire by each POI should not take more than one day. If a profile of the offender has already been created, that could be useful to consult when creating the POIPAT questionnaire because it can allow a good insight into the offender's personality and his/her possible intentions. However, Wilson (2012) warns that one must tread carefully while using a criminal profile as a source since its value might be low due to insufficient evidence or possible subjectivity.

# 3. Objective and subjective elements

The questionnaire elements should be designed as objectively as possible and therefore should not be influenced by the investigators' opinions or feelings. The questionnaire must be reliable, meaning it must be created so that different

evaluators can come to the same results. An example of a subjective element is the height of the offender because height may be determined in various ways by different individuals. A subjective element would say something like "the offender is very tall", but if written in an objective way it would be more like: the offender is at least 180 cm tall or higher. Every POIPAT must contain rules in which the elements are explained further to minimise differences between evaluators and thereby lower the subjective evaluation of the questionnaire.

#### 4. True or false elements

Each element has to be designed so that the only possible answers are "true" or "false", meaning it receives either all or none of the points in the assessment phase. It cannot be designed in such a way that an element is half true and half false because an element cannot be given only half the points allocated.

#### 5. Crucial elements

Crucial elements are those that are extremely important for the investigation and, if any of these elements was regarded as true for one of the assessed POIs, this person is automatically placed in the highest priority rank irrespective of their final score. There should only be a few of these elements in the questionnaire.

# 6. Element weighting

After consulting all investigation team members, each element should be weighted and assigned a score of between 5 and 50 points. Less important elements should be assigned fewer points and the most important ones the most points. If the elements are useless or completely unimportant for a certain investigation, they should not be included in the POIPAT. The basic number of points is 20, but points must be adjusted to suit the element according to its importance for the case:

- Unimportant elements: Elements not benefitting the investigation and the decision on a possible offender. An example of such an element is a speculated personal characteristic of the offender that is hard to verify and depends on a subjective opinion.
- Less important elements: Elements that are usually assigned 5–15 points. How many points should be assigned to each of these elements depends on their importance and value for the investigation. There may also be elements that started off as base elements (with 20 points being assigned), but whose value weakened when other factors came to light and were considered in the investigation. For example, an element called "vehicle access" could be less important because it is easy to assume most of the POIs would have had access to a vehicle but, if the element were changed to "SUV access", the element's value would go up, assuming that most POIs did not have access to a SUV.
- Important elements: Elements that are assigned the basic value of 20 points. This is the main criterion by which the questionnaire's designer can compare all of the elements and score them with more or fewer points based on their importance. An example of an important element is the offender's connection to the victim/s.
- Very important elements: Elements which are usually assigned 25 or 30 points. In most cases, elements should not exceed the basic 20 points,

- further explaining why there should only be a few very important elements. One example of such an element is the offender's sexual criminal history with respect to children.
- Crucial elements: Elements that are so important in themselves that if found to be true the POI would be placed directly on the highest priority level. These elements should be extremely rare and should be assigned 50 points. An example is an element called "uses prostitutes" in a case where all of the victims were prostitutes.

The weighting of the elements is also influenced by other factors:

- Availability of data: If the investigators are having a hard time gaining
  access to certain data for elements that are not as important for the
  investigation, they should be assigned fewer points.
- Frequency of the element within the population: If the element is frequent within the population, it should be assigned fewer points, and vice versa.
- **Subjectivity of the information:** The more subjective the element, the fewer points that should be assigned to it.
- Reliability of sources: The less reliable the source for designing an
  element, the fewer the points that should be assigned.

# 7. Establishing priority levels

When the evaluators have completed assessing all of the POIs, the point ranges determining the priority levels should be decided, namely which total scores constitute a high, medium or low priority. This is an important step in the final assessment because the priority levels have a big influence on the order in which the POIs are then ranked in the investigation. The higher the POI's final score, the greater the likelihood they are the offender. The POIs must to be split into three priority levels. The first level constitutes POIs assessed with more than 75% of all the possible points. The second level contains those assessed as having between 25%–75% of all possible points, whereas the third level is for POIs which had a final score of less than 25% of all possible points. Points are never halved and always rounded up.

# 4.1 Basic elements of the POIPAT

While creating a questionnaire, one can rely on the existing library of basic elements which may be important for an investigation. Wilson (2012) states that because every case is unique not all elements can be relevant to an investigation and that more elements which are specific to the investigation should be added. The basic elements in the POIPAT library are (Wilson, 2012):

# The Heading

Each questionnaire must have basic personal information concerning the POI such as first, middle and last name, date of birth and a reference number.

# Geography

This represents data which is extremely important for all investigations and includes the locations where the victim and offender lived, worked and frequented. This also includes where the offender made contact or attacked the

victim/s, where the victim was released, escaped or was placed, where important evidence was found or the offender's comfort zone is. The offender's comfort zone represents his/her previous places of residence and places they worked in or visited frequently during the time of the offence.

# Physical appearance

Physical characteristics should only be given in cases where it is assumed the offender had special or unusual physical features, which are unlikely to have changed very drastically over time (such as birth marks or tattoos). Problems with physical descriptions lie mostly with witnesses' memory, which can be unreliable and subjective, and the fact the offender's appearance can alter significantly in time.

#### Age

This is an element whose reliability is small for various reasons, especially in cold cases when assessing the offender's age can prove quite difficult, given that the relevant events happened a while ago.

#### Gender

Even if investigators do not know the offender's gender, it is almost safe to assume in violent deaths that the offender was male because males are the chief offenders in such cases. The investigators must nonetheless be careful when deducting the offender's gender because a wrong decision can lead them to very wrong conclusions.

# • Race/ethnicity/skin colour

When considering such features, relying on eyewitnesses can become quite problematic. Such information is not always available also because of their sensitivity, so it is best to avoid including such elements in the questionnaire.

#### Accent

A person's accent should only be considered an element if it is truly distinct and recognisable and, in that case, should be identified as broadly as possible.

#### Speech characteristics

Every individual has unique speech characteristics that help other people identify them, although some are even more pronounced like slurring, stuttering, lisping and other abnormalities.

# Lifestyle

A person's lifestyle can include information such as alcohol and drug abuse, whether the offender is involved in criminal activities, whether they are a loner or like to socialise, the hobbies they engage in etc. Identifying the offender's lifestyle can be challenging, particularly when the offender is unknown and the investigators do not have any reliable information available. In such cases, investigators must rely on other elements of the investigation to indicate the offender's lifestyle.

# Marital status

It is highly unlikely the investigators know or can deduct the offender's marital status at the time of the offence, which is why the element is based more on the availability of POIs than the marital status itself. In a homicide case, the offender needs considerable attention and free time for planning, choosing the victim, committing the offence, disposing the evidence and making other preparations.

The length and frequency of time spent away from home could indicate they are not likely accountable to a partner or may be in a relationship where the offender is very dominant and does not have to justify long and frequent absences. This makes it is reasonable to consider two elements: unattached (single, divorced and separated) and unaccountable (married, but the partner is extremely submissive or passive).

# Employment

It is also unlikely investigators know the offender's employment status at the time of the offence, although some aspects of the investigation or some trace evidence might lead investigators to believe the offender works in a certain industry.

#### Education

Some aspects of an offence or offender's behaviour may indicate the offender's education level, particularly when the offender has left some textual evidence behind. That could, for example, be the style of writing in a blackmail letter or a homemade complex explosive device, which would indicate some engineering knowledge.

# Criminal history

It is a generally accepted rule that a minority of offenders is responsible for the majority of crimes, hence there is a good chance the offender already has a criminal history. The possibility of a certain suspect being the offender increases if the person has been involved in very serious criminal offences because offenders do not typically start with the most extreme offences, but slowly progress. For POIPAT purposes, it is not necessary for the POI to have a criminal history because the information can be gathered from other reliable sources such as police reports, informants etc.

#### Links to the victim/s

There is a good chance that some direct or indirect link exists between the victim/s and the offender, which may be strong and easy to identify or weak and more difficult to prove. The weaker the link between the offender and the victim, the harder the case is to solve.

#### Availability of POIs

This element addresses the opportunity and availability of the POI to commit the offence. When it is believed the same offender is responsible for multiple offences, the more offences he is available for, the more likely it is that he is the offender. If investigators do not have information about the POI's availability at the time of the offence, it is presumed he was available. The questionnaire designer must determine the range of dates within which it is presumed the offence was committed.

#### Vehicle access

If the vehicle access element is important for an investigation, it is useful to determine if the offender had access to a vehicle and the vehicle's description. It becomes even more relevant when investigators can determine the vehicle type because that can significantly reduce the list of POIs, especially if the type is particularly rare in a certain residential area.

#### Other elements

This is the section containing all the elements not mentioned above, but which still seem relevant to the investigation. For example, access to a weapon, history of or documented interest in necrophilia, access to explosive devices or materials necessary for their creation etc.

#### Comments section

No matter how detailed and exhaustive the questionnaire, there will likely be instances when items in a POI's background not addressed in the POIPAT will be identified that arouse interest in him. Accordingly, at the end of the questionnaire a comments section appears where the questionnaire evaluators can state the information they think would be of interest to the investigators. While not adding any points to the POI's final score, it nonetheless elevates the priority ranking attributed to the POI. An example is a POI who does not own a weapon but has a surprisingly large amount of gun magazines and has downloaded pictures from the Internet showing people being killed with a gun.

#### The End section

Each questionnaire should have an ending that includes the range of priority points, a place for those people who scored or reviewed the POIPAT, and the dates upon which that occurred. These dates are very important because the POIs are assessed based on information available at the time of scoring. Should any new relevant information come to light, some POIs' scores could change.

# 5 SWOT ANALYSIS

SWOT analysis assesses internal strengths and weaknesses and external opportunities and threats in an organisation's environment. An internal analysis is used to identify the resources, capabilities, key competencies and competitive advantages of an organisation while an external one identifies opportunities and threats by examining competition and the environment (Sammut-Bonnici & Galea, 2015). SWOT analysis is valuable for determining which actions are needed and helping to focus on minimising the weaknesses while taking greatest possible advantage of the opportunities available (Gürel & Tat, 2017). Building on SWOT analysis, we performed an analysis of the POIPAT from the criminal investigation aspect. Its strengths and weaknesses were analysed based on the criminal investigation of a particular case, while the opportunities and threats in terms of respect for human rights and the usefulness of the method in investigating hot and cold cases. Internal analysis of strengths and weaknesses allows us to determine the method's value while investigating an individual crime, whereas external analysis of opportunities and risks helps determine its validity and reliability.

#### Strengths

- Mostly applicable to a case with many POIs.
- It eliminates the most improbable POIs.
- It focuses on those POIs who are most likely to be the offender.
- All the POIs are scored on the basis of the same questions.
- A faster way to connect the clues and see things from a different perspective.

- The categories have numerical values where specific categories can be joined with specific policies (Sekela, 2010).
- The questionnaire can always be revised and so can the final score.
- An objective way to achieve a priority ranking.
- The rules are well explained.
- The results can reveal a new direction for the investigation.
- It assists investigators with a decision-making formula.

#### Weaknesses

- It is a waste of time when not many POIs are involved.
- Creating the questionnaire requires considerable time and a careful examination of the documentation and the POIs in the investigation.
- The questionnaire may include faults that affect the further investigation (too many/too few questions, overly subjective questions).
- The weighting of the elements is subjective and may lead to huge differences and errors.
- The inferences transformed into elements are mostly indirect due to the subjective conclusions of investigators.
- If the inferences about the offender are wrong, the final scores can also be wrong.
- Completing the questionnaire takes a lot of time and errors can occur if the
  assessing occurs under time pressure,, especially if this process happens
  at the start of the investigation when the investigators do not have time
  to complete the questionnaire because they must gather information,
  making the POIPAT more effective in cold-case investigations.
- Investigators cannot always access all necessary information on all of the POIs, which can affect how they are assessed.
- The questionnaires are assessed by people who are investigating the hot case, which can have an impact on their objectivity.
- It must be adjusted to each individual case, which might entail a waste of time.
- Many of the suggested elements in the library are common. For example, a great many people own a car these days, yet owning a car is one of the elements.
- The categories are somewhat outdated. There is no mention of digital technology in the existing categories in the library of elements.
- It lacks a description of how to collect POIs.
- Specific knowledge about investigative tactics is needed.
- It only has a heuristic and cognitive value and does not count as evidence.
- It is hard for a researcher without practice to create the questionnaire a group effort should be involved when establishing the questions.

# Opportunities

- It is useful when there are many POIs or suspects.
- Useful in high-profile cases.
- It can help organise a case better.
- Applies to both hot and cold cases.
- It can possibly help and give some fresh impetus to some cold cases that have been put on hold.

- Each case requires a unique questionnaire to help investigators focus on important aspects of the case/offender.
- It helps link cases together. For example, based on the characteristics of the offender and suspects, or DNA, which link several cases together.
- The analysis may be useful for acquiring new ideas and holding discussions on the case.
- It builds up teamwork.
- It facilitates investigators' focus and efficiency in cases where there are many suspects.
- Efficiently ensures the proper use of resources (helping to save money and time).
- Any possible errors that might arise due to generalisations can be prevented by individualising the questionnaire.
- The system for creating the POIPAT elements allows the most objective questions possible to be posed.
- Since the questionnaire does not have to be formulated by the investigator, cooperation between researchers and investigators may be promoted.

#### Threats

- Investigators 'tunnel vision' can be a problem when the investigation ends up focused in merely one direction.
- The questionnaire simply refers to positive clues, not negative ones.
- The questionnaire only refers to incriminating evidence and not to exculpatory evidence.
- Wilson (2012) suggests the offender's profile can be used while creating
  the questionnaire, but warns about its value for the investigation due
  to its lack of evidence. Research shows that offender profiling is not a
  scientifically proven method, calls for caution and gives rise to strong
  criticism, largely on the grounds that very little empirical research exists
  (Chifflet, 2015).
- When the gender is unknown, it may be problematic to assume that
  males are automatically the offenders in violent deaths. Statistically
  speaking, more men than women commit violent deaths, yet women
  also commit violent offences.
- The danger of making assumptions when the backstory might be different to what appears. For example, when talking about an explosive body retrieved from the crime scene – it is not necessary that the offender made it himself but perhaps it was a home-made device that was bought on the Internet.
- Assuming that the minority of offenders is responsible for the majority
  of offences can also be dangerous because it can too quickly direct
  investigators to POIs with a criminal history and disregard others.
- Since the method assesses a large number of suspects, a danger exists that the process and assessment is too inaccurate.
- A POI may have the highest score in the end but might have a valid alibi. What to do in this case? Could the murder be a contract killing? Would that be perceived from the questionnaire?

- The determining and assessing of an individual element might be subjective if there is no direct evidence.
- Because not much research/literature about the method exists, it is hard to verify the method's validity and reliability.
- It should be adjusted to the conditions in Slovenia for it to function properly.
- The question is whether the method even makes sense in Slovenian conditions and if it is applicable to hot and cold homicide cases in Slovenia.<sup>9</sup>
- Differences in terminology: between "person of interest" and "suspect" in the Slovenian language it is lawful to investigate and search the background of *suspects*, but does it respect basic human rights if a mere *person of interest* is being investigated?

After assessing the POIPAT and all of its positive and negative aspects, we may conclude that many of the method's aspects can be seen as both negative and positive in certain ways and conditions. It is mostly applicable and useful in cases when a large number of POIs has been identified and it facilitates investigators' focus in such cases. The method can at the same time be a waste of time in cases with few POIs because there is no need for priority ranking. It represents an objective way of ranking priorities and creating elements, but can also be subjective when it comes to weighting and assessing the elements if no direct evidence exists. It also skips a step in POI collection and assumes the investigation has already identified the POIs in question. Creating the questionnaire takes considerable time and so does completing it, while errors might ensue if the assessing is done in a hurry. On the other hand, it supports the efficient use of resources, thus helping to save money and time, letting the investigators focus on important aspects of the investigation, and organise the case. The offender profile can help with those elements representing the offender in the questionnaire, but here the investigators must be careful because it is not a proven scientific method and can provide subjective information. The results can lead the investigation in a fresh direction, which is especially significant in cold-case investigations, but tunnel vision can also be a problem, appearing when investigators focus only in one direction. Investigators must never concentrate on only the highest-ranking POIs. The method must be adjusted for each individual case, which may prove very time-consuming, although having a questionnaire that is unique means the investigators can hone in on more important aspects of the case and address them first. The POIPAT can help link cases together when the same offender has committed several offences. However, it remains uncertain whether the method can be properly applied in hot and cold homicide cases in Slovenia because there is not such a strong need for the method.

<sup>9</sup> In the last 5 years, there have been about 18 homicides and 21 manslaughters on average in Slovenia (Policija, 2019). The murders are usually committed by one-off offenders and there are probably not many cases with a large number of POIs in question.

# 6 CONCLUSION

Two investigative situations indicate the possibility of a homicide: the disappearance of a person, where the circumstances show they could be the victim of a crime, and the finding of a corpse (Dvoršek, 2008). Since in such cases the main witness or victim is dead, it is vital to carefully investigate the case and the crime scene and to collect as many statements as possible. When investigators gather data, they analyse it and construct versions or hypotheses relating to the offence and the perpetrator. In the event of a homicide, when there is sufficient evidence and a reasonable suspicion, the investigators file a criminal complaint with the state prosecutor. Investigators sometimes find they have run out of ideas after having exhausted all possibilities of obtaining information and evidence, leaving them unable to find the offender and the case then grows cold (Delakorda & Maver, 2012). Cold cases are usually reopened in the event of new relevant information emerging and the investigation then continues. The process of investigating cold cases is quite different from that for hot homicides. It is especially important that investigators become well familiar with the case and study all of the gathered information and evidence very carefully. Cold cases can have a detrimental impact on the productivity of investigators because they find it harder to focus on hot cases if they know there are cases that have never been resolved and, apart from the families of the victims who may be heartbroken and stressed, there might be resistance from witnesses who are essential to the investigation since the perpetrator is still on the loose (Smythe, 2009). Cold cases are usually investigated by special units for cold-case investigation that apply different processes, strategies and evaluation models in their investigations. One evaluation model or tool for suspect priority ranking is the POIPAT method which places suspects having most in common with the offender's profile in the forefront so that the investigators first consider them. In cases with a large number of suspects, the POIPAT proves to be very useful for eliminating suspects who are the least likely to be the perpetrators of a particular offence. This saves the investigators substantial work and effort in the investigation (Wilson, 2012).

The SWOT analysis found many positive and negative aspects about the method and supported the claim that there are many aspects which may be seen as both positive and negative in certain conditions. The POIPAT yields a numerical value that enables the joining of a specific category with specific policies that accompany the numerical value with greater details in the collection, collation and analysis of homicide cases (Sekela, 2010). The method helps organise and tie cases together while giving investigators focus and direction. It is useful and applicable in cases with many POIs, but is useless and not appropriate when there are very few POIs or suspects because there is no need to rank them by priority. It does not provide a reasoning concerning how to collect POIs and merely presumes the POIs have already been identified in a certain case. This is possibly because the method was developed in response to a certain homicide case that had thousands of POIs already in scope (Sutmuller, den Hengst, Barros, & van Gelder, 2018). It is a way of ranking priorities and tries to be as objective as possible in the process of creating and assessing the questionnaire but it can still also be subjective in some parts.

The weighting of the elements is left up to the subjective opinion and judgement of the person creating the questionnaire. Basic rules are given that describe the appropriate weighting, yet the final decision is left to the creator. The use of benchmark elements in POIPAT makes several items of evidence share the same weight, making the method less discriminating with respect to POIs (Sutmuller et al., 2018). It is otherwise an efficient method ensuring the proper use of resources, helping investigators to save money and time and to initially focus on the most likely suspects and continue from there. While creating it, the questionnaire must be carefully conceived with the help of the whole investigative team, making it easier to determine important aspects of the investigation that point to the offender. The POIPAT designer must be careful while choosing the number of elements and its contents so that no faults are introduced which could affect the further investigation. The library of elements is nicely described and includes many examples of pre-set categories of elements, which are usually important in an investigation, albeit nowadays it could use an improvement. The elimination categories in the basic rules do not explicitly include new classes of evidence such as telecom data and camera footage so the integration of new classes of forensic evidence as pre-set elimination categories could help better discriminate POIs (Sutmuller et al., 2018). Like any similar tool, when used properly the POIPAT assists the investigator or police force of jurisdiction with a decision-making formula (Sekela, 2010). The rules are generally well explained and a template of the questionnaire is available, although it is unfortunately not properly applicable to the Slovenian context. It should be adjusted to the conditions facing Slovenia and redesigned if it is to be properly tested and used.

The POIPAT was first introduced in 2013 to the wider academic public in Slovenia at the 14th Dnevi varstvoslovja conference where Darko Maver, Damjan Miklič and Danijela Frangež presented analysis of a homicide case in Ljubljana and verified the method's usefulness (D. Maver, interview, 22 August 2016). They concluded the method could also be useful and beneficial in the Slovenian context, but it should first be thoroughly studied and then adjusted to Slovenian conditions (Maver et al., 2013). The method has a heuristic and cognitive value, but no evidential value and will therefore not hold up in court (D. Maver, interview, 22 August 2016). For a better understanding of POIPAT and more meaningful results, the method should be tested on a cold case or in a hot homicide investigation where the perpetrator has not yet been found because in that way the researchers could avoid the biased and subjective opinions which may unintentionally arise and obtain objective and valid results (Maver et al., 2013). Aside from the mentioned research, the absence of conducted research, written articles or other analysis coupled with the one study of its usefulness by itself does not provide valid, adequate or satisfactory results, which is ultimately not enough for use in practice. To ensure the method's recognisability and in the hope of investigators trying the method and considering introducing it in their investigative strategies, and testing it on different cases, proper research must be conducted in this field, more articles should be written while it should be presented at as many conferences and events as possible. The method definitely shows promise and may be useful but, until researchers and investigators have opened up their minds and perspectives, one cannot confidently claim it holds any practical value.

# REFERENCES

- Adderley, R. W., & Musgrove, P. (2001). Police crime recording and investigation systems: A user's view. *Policing: An International Journal of Police Strategies & Management*, 21(1), 100–114.
- Adjorlolo, S., & Chan, H. C. (2017). The nature of instrumentality and expressiveness of homicide crime scene behaviors: A review. *Trauma, Violence, & Abuse,* 18(2), 119–133.
- Alison, L., Goodwill, A., Almond, L., van den Heuvel, C., & Winter, J. (2011). Pragmatic solutions to offender profiling and behavioural investigative advice. *Legal and Criminological Psychology*, 15(1), 115–132.
- Bache, R., Crestani, F., Canter, D., & Youngs, D. (2007). Application of language models to suspect prioritisation and suspect likelihood in serial crimes. In IAS 2007 3rd International Symposium on Information Assurance and Security (pp. 399–404). Manchester: IEEE. Retrieved from https://ieeexplore.ieee.org/ document/4299806
- Beek, M., Eshof, P., & Mali, B. (2010). Statistical modelling in the investigation of stranger rape. *Journal of Investigative Psychology and Offender Profiling*, 7(1), 31–47.
- Cole, T., & Brown, J. (2014). Behavioural investigative advice: Assistance to investigative decision-making in difficult-to-detect murder. *Journal of Investigative Psychology and Offender Profiling*, 11(3), 191–220.
- Chifflet, P. (2015). Questioning the validity of criminal profiling: An evidence-based approach. *Australian & New Zealand Journal of Criminology*, 48(2), 238–255. doi:10.1177/0004865814530732
- Delakorda, D., & Maver, D. (2012). Preiskovanje neraziskanih umorov [Investigation of cold cases]. In B. Dobovšek, P. Umek, & T. Pavšič Mrevlje (Eds.), 13. *Slovenski dnevi varstvoslovja* (pp. 49). Ljubljana: Fakulteta za varnostne vede.
- Devery, C. (2010). Criminal profiling and criminal investigation. *Journal of Contemporary Criminal Justice*, 26(4), 393–409. doi:10.1177/1043986210377108
- Dvoršek, A. (2008). *Kriminalistična metodika* [Methodology of criminal investigation] (2nd ed.). Ljubljana: Fakulteta za varnostne vede.
- Goodwill, A. M., & Alison, L. J. (2006). The development of a filter model for prioritizing suspects in burglary offences. *Psychology, Crime & Law, 12*(4), 395–416.
- Gürel, E., & Tat, M. (2017). SWOT analysis: A theoretical review. *The Journal of International Social Research*, 51(10), 994–1006.
- Heurich, C. (2009). Helping local police departments solve cold cases. *The Police Chief*, 76(9), 42–47.
- Hughes, J. A. (2015). Time and crime: Which cold-case investigations should be reheated? *Criminal Justice Ethics*, 34(1), 18–41.
- Long, M., Alison, L., Tejeiro, R., Hendricks, E., & Giles, S. (2016). KIRAT: Law enforcement's prioritization tool for investigating indecent image offenders. *Psychology, Public Policy, and Law*, 22(1), 12–21.
- Maver, D. (2007). Spoznavni (hevristični) in dokazni (silogistični) vidiki preiskovanja kaznivih dejanj [Cognitive (heuristic) and evidential (syllogistic) aspects of criminal investigation]. In A. Dvoršek, & L. Selinšek (Eds.), *Prob-*

- lemi dokazovanja v zahtevnih kazenskih postopkih (pp. 33–44). Maribor: Pravna fakulteta; Fakulteta za varnostne vede.
- Maver, D. (2012). Cold cases investigation: Evaluation model and strategies. In Ž. Nikač et al. (Eds.), *Međunarodni naučni skup "Dani Arčibalda Rajsa"* (pp. 47–54). Beograd: Kriminalističko-policijska akademija.
- Maver, D., Miklič, D., & Frangež, D. (2013). *Prioritetni seznam osumljencev v teoriji in praksi* [Priority list of suspects in theory and practice]. Paper presented at 14. Slovenski dnevi varstvoslovja, Fakulteta za varnostne vede, Ljubljana.
- Policija. (2019). *Letno poročilo o delu policije za leto 2018* [Annual report on police work for 2018]. Ljubljana: Ministrstvo za notranje zadeve, Policija. Retrieved from https://www.policija.si/images/stories/Statistika/LetnaPorocila/PDF/LetnoPoro%C4%8Dilo2018.pdf
- Pettem, S. (2013). Cold case research: Resources for unidentified missing and cold homicide cases. Boca Raton: CRC Press.
- Phillips, P. J., & Pohl, G. (2018). Terrorism watch lists, suspect ranking and decision-making biases. *Studies in Conflict & Terrorism*, 41(2), 1–17.
- Quinet, K., & Nunn, S. (2014). Establishing victim-offender relationship of initially unsolved homicides: Partner, family, acquaintance or stranger? *Homicide Studies*, 18(3), 271–297. doi:10.1177/1088767913493783
- Regini, C. L. (1997). The cold case concept. *FBI Law Enforcement Bulletin*, 66(8), 1–6. Sammut-Bonnici, T., & Galea, D. (2015). SWOT analysis. In C. L. Cooper (Ed.), *Wiley encyclopedia of management: Strategic management* (pp. 1–8). Chichester: John Wiley & Sons.
- Schuster, B. (2008). Cold cases: Strategies explored at NIJ regional trainings. *National Institute of Justice Journal*, (260), 24–26. Retrieved from http://www.nij.gov/journals/260/pages/cold-case-strategies.aspx
- Sekela, M. J. (2010). A review of uncleared missing person cases and police responses in Alberta (Master thesis). Abbotsford: University of Fraser Valley. Retrieved from https://core.ac.uk/download/pdf/55291295.pdf
- Smythe, A. B. (2009). Homicide investigations. New York: Nova Science.
- Sutmuller, A. D, den Hengst, M., Barros, A. I., & van Gelder, P. H. A. J. M. (2018). Comparison of methodologies used in homicide investigations to collect, prioritize, and eliminate persons of interest: A case study of three Dutch real-world homicide cases. *Policing: A Journal of Policy and Practice*, 1–16. doi:10.1093/police/pay088
- Snook, B., Wright, M., House, J. C., & Alison, L. J. (2006). Searching for a needle in a needle stack: Combining criminal careers and journey-to-crime research for criminal suspect prioritization. *Police Practice & Research*, 7(3), 217–230.
- Stare, D. (1998). Preiskovanje nerešenih umorov [Investigation of cold cases]. *Varnost*, 46(13), 32–35.
- Taha, K., & Yoo, P. D. (2018). A Forensic system for identifying the suspects of a crime with no solid material evidences. In 2018 IEEE 16th Intl Conf on Dependable, Autonomic and Secure Computing, 16th Intl Conf on Pervasive Intelligence and Computing, 4th Intl Conf on Big Data Intelligence and Computing and Cyber Science and Technology Congress (DASC/PiCom/DataCom/CyberSciTech) (pp. 576–583). Athens: IEEE. Retrieved from https://ieeexplore.ieee.org/document/8511950

Yokota, K., Fujita, G., Watanabe, K., Yoshimoto, K., & Wachi, T. (2007). Application of the behavioral investigative support system for profiling perpetrators of serial sexual assaults. *Behavioral Sciences and the Law*, 25(6), 841–856.

Wilson, L. (2012). Criminal major case management: Persons of interest priority assessment tool (POIPAT). New York: CRC Press.

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# Police Visibility as an Influencing Factor on Citizens' Perception of Safety

VARSTVOSLOVJE, Journal of Criminal Justice and Security, year 21 no. 2 pp. 135–160

# Krunoslav Borovec, Iva Balgač, Irena Cajner Mraović

# Purpose:

The objective of this research was to determine to what extent tactics based on police visibility can influence one of the important segments of safety, i.e. citizens' subjective feeling of safety. The research was conducted in order to determine the connection among various aspects of police visibility, being predictor variables, with sense of safety.

# Design/Methods/Approach:

The data for this research were collected on a sample containing 1,096 respondents, which can be considered representative of the Republic of Croatia based on socio-demographic characteristics. Beside seven socio-demgraphic variables, the questionnaire used in the research contained 34 variables found in following sub-scales for: perception of crime victimization risk and frequency; perception of feeling of safety and assessment of self-protection ability; perception of incivilities that disrupt the public order; perception of the presence of problematic categories of persons; perception of police visibility. The data were processed by using multivariate regression and multivariate quasi-canonical analyses.

# Findings:

The research results point to a statistically significant, yet relatively weak connection between the components of police visibility and the sense of safety. On the one hand, police foot patrols and dealings towards persons disrupting public order in the neighbourhood have a positive effect on citizens' feeling of safety; on the other hand, police car patrols have an opposite effect.

# Practical Implications:

This research is important not only due to providing scientific evidence for the connection between police visibility and citizens' sense of safety, but also due to significant practical implications on police dealings. When planning police fieldwork, negative aspects of car patrols on the perception of safety have to be taken into account. What should be considered are new, alternative forms of fieldwork, which enable the intervention ability of police, as well as which allow for foot patrols and contacts between citizens and the police in non-incident situations.

# Originality/Value:

This research is the first research focusing on the influence of police visibility on the feeling of safety of citizens in Croatia. Considering the used metodology the research is an original scientifical contribution to the understanding of the impact of police field work to citizens' safety.

# UDC: 351.741

**Keywords**: police visibility, police car patrols, police foot patrols, sense of safety, fear of crime, perception of crime

# Vidnost policije kot dejavnik vpliva na občutek varnosti državljanov

# Namen prispevka:

Cilj te raziskave je bil ugotoviti, v kolikšni meri lahko taktike, ki temeljijo na vidnosti oz. prisotnosti policije, vplivajo na enega od pomembnih segmentov varnosti, torej na subjektivni občutek varnosti državljanov. Raziskava je bila izvedena z namenom, da se ugotovi povezava med različnimi vidiki vidnosti oz. prisotnosti policije, na podlagi katere lahko poskušamo napovedati občutke varnosti pri prebivalcih.

### Metode:

V raziskavo je bil vključen vzorec 1.096 anketirancev iz Republike Hrvaške, katerega reprezentativnost temelji na socio-demografskih značilnostih. Poleg sedmih sociodemografskih spremenljivk je anketni vprašalnik vseboval 34 spremenljivk, ki so razvrščene v naslednje sklope: zaznavanje tveganja za kriminalitetno viktimizacijo in njena pogostost; zaznavanje občutka varnosti in ocenjevanje sposobnosti samozaščite; zaznavanje nespoštljivosti, ki moti javni red; zaznavanje prisotnosti spornih kategorij oseb; zaznavanje vidnosti oz. prisotnosti policije. Pri obdelavi podatkov je bila uporabljena metoda multivariatne regresije in multivariatne kvazikanonične analize.

# **Ugotovitve:**

Rezultati raziskave kažejo na statistično pomembno, a razmeroma šibko povezavo med vidnostjo policije in občutkom varnosti. Po eni strani imajo policijske peš patrulje in ukvarjanje z osebami, ki motijo javni red v soseščini, pozitiven učinek na občutek varnosti državljanov, po drugi strani pa imajo policijske patrulje z avtomobili ravno nasproten učinek.

# Praktična uporabnost:

Raziskava je pomembna ne le zaradi zagotavljanja znanstvenih dokazov o povezavi med vidnostjo oz. prisotnostjo policije in občutkom varnosti državljanov, temveč tudi zaradi pomembnih praktičnih posledic za policijsko delo. Pri načrtovanju policijskega terenskega dela je treba upoštevati negativne vidike avtomobilskih patrulj glede zaznavanja varnosti. Upoštevati je treba nove, alternativne oblike terenskega dela, ki omogočajo intervencijo policije in stike med državljani in policijo v nekriznih situacijah.

## Izvirnost/pomembnost prispevka:

Gre za prvo raziskavo, ki se osredotoča na vpliv vidnosti oz. prisotnosti policije na občutek varnosti hrvaških državljanov. Glede na uporabljene metode

je raziskava izvirni znanstveni prispevek k razumevanju vpliva policijskega terenskega dela na zaznavanje varnosti državljanov.

# UDK: 351.741

**Ključne besede:** vidnost policije, avtomobilska policijska patrulja, policijske peš patrulje, občutek varnosti, strah pred kriminaliteto, zaznavanje kriminalitete

# 1 INTRODUCTION

Changes that have been taking place in policing over the past thirty years and that have led to new policing concepts, such as community policing or problem oriented policing, are the results of efforts to find more effective ways of policing, which will promote public safety and enhance citizens' quality of life, i.e. increase the feeling of safety and reduce the fear of crime. The scope and nature of crime, as well as changes in the type of crime have led the police to find more effective solutions and to expand crime control tactics with crime prevention strategies, increasing the feeling of safety and the quality of life in communities. Therefore, lack of feeling of safety, i.e. fear of crime has turned into a significant problem and has gradually become the focus of police interest. Due to the function that the police have in society, it is considered that their presence and visibility can successfully reduce such fear in local communities, i.e. improve citizens' overall sense of safety. Namely, research related to perception of safety provides scientific evidence on the effectiveness of various policing strategies in reducing fear among citizens (Bureau of Justice Assistance, 1994). These strategies, to be effective, have to be tailored specificly for the nature and cause of fear of crime (Cordner, 2010). Cordner (2010) recommends a targeted problem-oriented approach as the most effective strategy for fear reduction but also recognizes 12 crime-reductions measures or actions devides into six diffetent (effective) strategies: traditional approach (reducting crime); professional policing (motorized patrols; police visability; rapid response; solving crimes); crime prevention (target hardening, street lighting); community policing (police-citizen contact; public confidence in police; public information); broken windows (reducing disorder) and Targeted-oriented policing (targeted responses).

Modern approaches to policing, such as community policing in its comprehensive sense, encompass numerous aspects, having as one of teir primary goals to create the feeling of safety (Schorer, 2007). As opposed to traditional policing which is focused on crime through identifying and arresting perpetrators, as well as assessing police work through police statistics, i.e. identified and reported crime, modern policing particular attention paids to the subjective feeling of safety, i.e. fear of crime. This is understandable if we take into consideration the fact that citizens' satisfaction with the police and their activities depends, in large part, on whether citizens feel safe or not. According to the traditional policing concept, the police become responsible only when a crime is committed or when some other incident takes place. For this reason, citizens consider this kind of policing passive because it is only concerned with consequential reactions to crime, and not with the possibilities of preventing crime, as well as concerns and

fear that may appear among citizens. On the other hand, a proactive approach aimed at solving problems before they lead to crimes helps reduce the fear of crime and increases the feeling of citizens' control over the community (Cordner, 2010; Fleissner & Heinzelmann, 1996) which is an elementary human need. Numerous strategies were developed within that framework, with the aim of increasing police presence and visibility among citizens, not only in situations that require police reaction, but also in non-incident situations that enable contact between the police and citizens that is free of conflict and tension.

# 2 FEAR OF CRIME CONCEPT AND ITS RELEVANCE

Police dealings should be aimed at solving the issue of feeling unsafe and fear of crime because fear of crime can often be just as harmful as the crime itself. A growing number of citizens feeling unsafe results in physical and psychological withdrawal from society, weakens informal social control, and diminishes the capacities of individuals and the community to jointly solve problems they face. The consequence of this is grounds for the development of crime and incivilities; moreover, it weakens trust in the institutions and the ability of a state to protect its citizens.

Fear of crime can be explained in various ways, among other things, as a feeling of safety/lack of safety, probability of victimisation, fear, confusion due to crime. "Fear of crime is a rational or irrational state of concern or anxiety about the likelihood of criminal victimisation" (McLaughlin, 2001, p. 118). It is an emotional reaction characterised by a sense of danger and anxiety produced by the threat of physical harm elicited by perceived clues in the environment that relate to some aspect of crime (Church Council on Justice and Corrections, 1995; John Howard Society of Alberta, 1999). It can also be defined as a person's or a group's sense, which represents a belief, perception or emotion related to crime or public order, and which has a negative impact on their feelings, thoughts or behaviour and the quality of life (Glasnović Gjoni, 2006). Finally, Ferraro and LaGrange (1987, p. 72) defined the fear of crime as "negative emotional reactions generated by crime or symbols associated with crime". This definition is often recognised in the literature on fear of crime because it also takes into consideration emotional responses to situations and circumstances that can create fear, as well as cognitive assessment of victimisation risk, which can also create fear (Ferraro, 1995; Ferraro & LaGrange, 1987). This fear can be a reaction to direct danger when a person comes face to face with some form of violence. As people have the ability to anticipate future events by means of diverse symbols (streets littered with garbage, devastated public property, graffiti, abandoned buildings and the like), fear of crime can appear due to an anticipated possible threat or as a reaction to an event, i.e. some characteristics of the surroundings.

Ferraro (1995) suggested that perceived risk of crime and fear of crime should be considered different constructs. Such a standpoint is taken in this research. By distinguishing fear of crime from assessment of risk, the same author claims that fear includes an emotional, and sometimes even a psychological reaction to the assessed danger. The author further explains that fear is essentially a different psychological experience than the assessment of a potential risk situation. While risk also bears a cognitive component, fear is essentially based on emotions. Robinson (1998) agrees with his definition, and defines fear as a feeling of possible injury, regardless of whether the fear is realistic or unrealistic. The same author defines risk assessment as an assessment of probability that an injury will actually occur. This does not mean that someone who perceives their surroundings as unsafe will, at the same time, have a fear of crime.

Warr (2000) differentiates between fear of crime and risk assessment by defining fear of crime as an emotion, a feeling of alarm or dread caused by an awareness or expectation of danger. Accordingly, fear of crime includes a variety of emotional states, attitudes or perceptions, including lack of trust towards others, anxiety, assessment of injury risk, fear of strangers, concern over the situation in the neighbourhood or decrease in the moral values in society. Furthermore, the same author claims that fear is a reaction to perceived environment, not a perception of that environment. Warr (2000) considers perceived risk of harm a proximate cause of fear of crime. Moreover, fear is not a belief, attitude or evaluation even though it may result from the cognitive processing or evaluation of perceptual information.

A somewhat different approach to this issue is taken by Rountree (in Doležal, 2009). Instead of differentiating fear of crime from risk assessment, Rountree defines fear of crime as a combination of the cognitive (perception of risk) and the emotional (being afraid). The author operationalizes fear as a person's concern that he or she is going to be a victim. Cordner (in Silverman & Della-Giustina, 2001) defines fear of crime as an emotional and behavioural phenomenon, but does not elaborate. The authors Gabriel and Greve (2003) also use the so-called behavioural component, which indicates the possibility for the existence of fear of crime. Behavioral component is interpreted as an act of avoiding the perceived risk or a threat, or conducting specific self-protection measures. From the stated definitions, it is clear that there is no consensus on how to define fear of crime.

Only rare researches on fear of crime have been conducted in Croatia and following are worth mentioning: "Youth and Secutiy: Does Youth feel safe in the City of Zagreb" (Galić, Ljubotina, Matić, Matešković, & Ninić, 2009); Fear of Crime: Gender and Age Characteristics" (Glasnović Gjoni, 2006); "Fear of Crime in Slovenia and Croatia (Meško & Kovčo, 1999) and "Extent of fear of crime in Croatia and effects of television viewing on fear of crime" (Šakić, Ivičić, & Franc, 2008).

By analysing the fear of crime paradigms provided by the mentioned authors, it can be concluded that this fear, in the majority of cases, refers to an emotional reaction caused by crime in general or symbols identifying it, which differentiates it from risk assessment, concern or concrete behaviour.

# 3 PERCEPTION OF CRIME AND INCIVILITIES

The perception of crime and incivilities significantly influences citizens' feeling of safety and their perception of the police. Both crime and incivilities in their various forms belong to phenomena that destructively affect social surroundings. Crime causes citizens to feel anxious and unsafe, and reduces their trust in state

institutions and their ability to protect them (Singer et al., 2009). However, public trust in the police does not increase with a decrease in crime frequency. This means that citizens' perception of crime and its trends often does not correspond to the actual situation. For that reason, research is necessary on the predictors of the perception of crime, as well as on strategies that will encourage those citizens with a negative perception to change it to a positive one (Fielding & Innes, 2006; Herrington & Millie, 2006).

Conclusions on the public perception of crime are generally based on data on assessment of the prominence of crime as a social problem in relation to the perception of other social problems. According to data for 2002, citizens of Croatia perceived unemployment, poverty and corruption, followed by crime (International Institute for Democracy an Electoral Assistance, 2002), as the most important problems in the country. In research conducted in 2003, unemployment and corruption, followed by crime, were selected as the three most important problems (Čular, 2005). In research studies conducted in 2005 and 2006, crime was second after unemployment according to perceived prominence (Standard Eurobarometer in Franc, Ivičić, & Šakić, 2007). Franc et al. (2007) found that unemployment, as well as economical crime and corruption are still perceived as largest problems of society by citizens of Croatia. Crime and violence are perceived as a society problems of low or mid intensity. It is almost a rule that a larger share of citizens consider crime a greater problem at the national than at the local level.

In Great Britain, studies on the perception of crime frequency have a longer tradition than in Croatia, being conducted since 1996 (Thorpe & Hall, 2009). Although trends are different, there is a constant in indicators showing that the majority of people find crime to be rising at the national level and declining at the local level. In other words, citizens believe that, at the national level, the type of crime rising is the one that receives greater media coverage, mostly violent crime as opposed to property crime. Predictors of the perception of crime as a social problem in general, and in particular in Croatia, have not been sufficiently researched. The reasons for differences between the real frequency and type of crime and its perception are most frequently sought in the impact of how media present crime to citizens. The differences in perception of certain criminal offences indicate that, when it comes to a crime that occurs rarely, there is a small probability that citizens will have personal experiences, and their perception is more influenced by the significant media coverage of those events (Pollak & Kubrin, 2007). It is essential to emphasise that, nowadays, media represent an important source of information on all the problems that do not represent everyday experience of average people, while among them are definitely problems related to serious, violent crime (Teece & Makkai, 2000). According to Dubois (2002) the media are the source of information people count on to mould their opinion of the world around them. With respect to the presence of crime in said world, the author beilives the media are the primary source of information. The study conducted by O'Connell (1999) showed that the reasons for this skewed perception on crime lie in the way it is presented in media because:

- extreme and atypical crime is shown more frequently,
- more space is devoted to extreme crime,
- mostly crime involving vulnerable victims and non-vulnerable perpetrators is presented,
- they are pessimistic about the criminal and legal systems.

For the above stated reasons, it is an important issue how media, by covering certain criminal events, influence the perception of crime, as well as the overall sense of safety.

The perception of crime frequency varies depending on demographic and socio-economic characteristics. Accordingly, a British study (Thorpe & Hall, 2009) showed that age (35 and over) is strongly related to the perception of rise in crime frequency at the national level. On the other hand, the perception of significant rise in crime at the local level is related to variables, such as prior victimisation and type of area where respondents live. When testing police dealings in Houston, Brown and Wycoff (1986) determined that certain strategies based on the community policing concept improved the perception of crime frequency by reducing the share of those who consider that there is a high crime frequency in the community. This is a statistically significant relationship between concern over crime and dissatisfaction with local police (Jackson & Bradford, 2009). The increased perception of crime is mostly in accordance with a higher incidence of crime and incivilities in areas where citizens live, whereas concern over crime is particularly high among citizens with small children (Paskell, 2007).

In addition to crime, incivilities draw attention of citizens living or working in a certain area, particularly because disrupted public order, whether in the form of physical disruptions in the surroundings or social disruptions, i.e. anti-social behaviour, significantly influences the quality of life. The presence of incivilities in certain areas discourages citizens from using these areas thereby reducing the number of desired activities and social contacts, and increasing the number of undesired activities and presence of risk persons. All of this diminishes the cohesion of inhabitants, as well as reduces and even encourages loss of social control. Both incivilities and fear of crime are statistically significant predictors of citizens' satisfaction with the police. To put it simply, fear of crime, perception of incivilities and informal social control are more important for public trust in the police than objective indicators on crime and incivilities (Jackson & Bradford, 2009). A British study (Walker, Flatley, Kershaw, & Moon, 2009) showed significant differences in the perception of anti-social behaviour based on demographic and socio-economic characteristics of respondents. Not surprising is the fact that perception also depends on the level of deprivation and physical disruption in the surroundings. For instance, those living in multi-cultural areas perceive a high level of anti-social behaviour three times more often than citizens in other areas. Furthermore, 31 per cent of citizens living in deprived areas perceive a high level of anti-social behaviour as opposed to only seven per cent of citizens living in less deprived areas. The perception of anti-social behaviour (Thorpe & Hall, 2009) also varies depending on age and prior victimisation. People aged from 16 to 24 perceive anti-social behaviour to a larger extent than other age groups. Those aged over 75 perceive anti-social behaviour to a lesser extent. These results can be explained by differences in ways of life, meaning that people from various age groups, based on different ways of life, type and number of activities they engage in, perceive anti-social behaviour differently. It should be emphasised that persons who perceive incivilities to a greater extent have a poorer perception of the police (Cao, Frank, & Cullen, 1996). Some authors (Brown & Wycoff, 1986) argue that police strategies can influence the perception of incivilities in a community.

# 4 POLICE VISIBILITY

Increased police presence and visibility are keys to the functioning of the police. They are related to technological development, which can be considered advancement for every police organisation. However, during periods of professionalization, by establishing a range of highly specialised departments, and in particular through technical equipment and modernisation, the police have become detached from citizens by closing themselves in offices and laboratories, communicating through modern communication channels and means, patrolling mostly in police cars, even when simply patrolling a certain area (Ent & Hendricks, 1991). With time, the number of foot patrols has been systematically reduced or even abandoned altogether. The particular advantages of this type of police work were soon noticed. Police officers were able to move and patrol in an easier manner, covering a significantly larger area than in the past, in addition, the speed and number of police interventions per day were improved. In other words, the police increased their effectiveness in reacting to incidents, at the same time becoming less preventive. By examining the process of police modernisation, Mouhanna (2007) concluded that increased specialisation and professionalization resulted in an increasing lack of communication between the police and citizens. Contacts between the police and citizens were reduced to incidents when dealing with committed crime and offences, and restoring public order. Encounters between the police and citizens in non-incident situations were reduced to the least possible extent; consequently, the police have lost in terms of presence and visibility in local communities and neighbourhoods. Finally, both sides, the police and citizens, have lost in terms of quality of their relationship and cooperation. The visible presence of the police had an impact on those citizens planning on breaking the law by discouraging them from their intentions, while it provided a certain degree of safety to other citizens. For this very reason, the police patrolling primarily on foot in local communities and neighbourhoods were regarded as a manner of building new relationships between citizens and the police.

Schorer (2007) also emphasises that presence, visibility and contact are, among other things, important in order to create a feeling of safety, to create safety in an objective and measurable way, as well as to encourage a relationship between the police and citizens built on trust. Regular citizens concerned over the lack of safety can only be reassured by an active and visible police presence. Police programmes aimed at increasing police visibility and making them more accessible to citizens meet expectations because they promote cooperation between the police and citizens, prevent crime and incivilities, increase safety and reduce fear of crime (Fleissner & Heinzelmann, 1996).

Police visibility in a well-defined form has rarely been examined as a potential factor influencing fear of crime (Salmi, Grönroos, & Keskinen, 2004). Only a small number of citizens has personal contact with the police, meaning that, apart from direct experience, the perception of policing can also significantly influence the perception of a criminal situation and the sense of fear of crime. According to Salmi et al. (2004), respondents who saw police foot patrols more often were less afraid of property crime and crime against life and limb. However, seeing the police patrolling in various forms can have a different impact on citizens. For instance, seeing the police in activities related to car patrols resulted in an increase in fear of crime against life and limb and property crime. The results of the same research indicated that a simple police activity, such as exiting the police car (not only in crime-related circumstances) for informal encounters with citizens, reduces fear of crime.

The experiment conducted in Elsinore (Holmberg, 2005) showed that there was no connection between the citizens' perception of police visibility and their feeling of safety. This finding can be attributed to the fact that an individual's feeling of safety is related to numerous factors, such as gender, age, education, social integration, feeling of physical/mental health and vulnerability, as well as level of urbanisation, social loss (deprivation) and victimisation risk in the area where the individual lives. The police have little or no influence on the majority of these factors. Citizens will, in certain situations, interpret police presence, as a symbol of a criminal offence being committed in their neighbourhood, which will hardly enhance their feeling of safety. Consequently, it should be pointed out that police visibility does not influence citizens' feeling of safety unambiguously, meaning that visibility-based police approaches should be applied in a careful and controlled manner. The presence and openness of the police for collaboration and communication with citizens can have a positive impact on the public views and perception of the police. On the other hand, police presence in combination with repressive actions can have an opposite effect. For that reason all activities related to higher police visibility have to be carfully planned and based on the needs of a certain community.

# 5 RESEARCH GOALS AND METHODOLOGY

Described in the introductory section is the importance of conducting research on the influence of police visibility on citizens' sense of safety, primarily because numerous police strategies aimed at improving citizens' safety are based on police visibility. Research in this area must be a precondition for creating and managing effective police strategies, i.e. it must help in establishing realistic foundations and expectations for projects aimed at increasing police visibility.

In other words, the goal of this research is to determine the connection between specific aspects of police visibility and the sense of safety, i.e. its affective and cognitive dimensions. In addition, the goal is to examine whether all aspects of police visibility have an equal impact on the sense of safety.

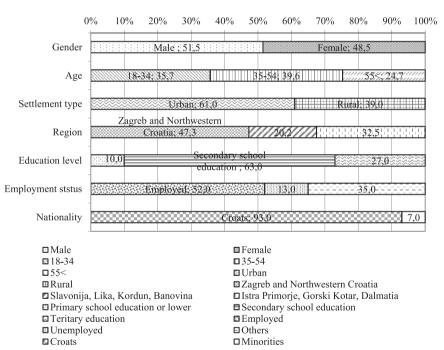
In accordance with the stated goals, the following hypothesis has been set:

H1: There is a statistically significant connection between police visibility

and variables related to the sense of safety: fear of crime, perception of crime risk and frequency, as well as perception of incivilities. Respondents who perceive the police as more visible are less afraid of crime; moreover, they perceive crime risk and frequency, and incivilities as lower.

The research encompassed a total of 1,096 respondents over 18 years of age. The sample was representative for the Republic of Croatia according to county, settlement size, gender and age. The data used for this research was collected under the large 2009 project of Croatian Ministry of the Interior and United Nations Development Programme titled "National Public Opinion Survey on Citizens Perception of Safety and Security in the Republic of Croatia". The field research was carried out by a professional agency using two quantitative methods: telephone interviews and face-to-face interviews in households. The sample was multiply stratified in the way that telephone numbers for telephone interviews were randomly selected, while 207 settlements across Croatia were randomly selected for face-to-face interviews in households. Figure 1 depicts the sample structure according to the most important demographic variables.

Figure 1: Structure of respondents according to the most important demographic variables N = 1,096



# 5.1 Questionnaire

A survey was used in the research. Beside seven socio-demgraphic variables, the questionnaire used in the research contained 34 variables found in following sub-scales for: perception of crime victimization risk and frequency; perception of feeling of safety and assessment of self-protection ability; perception of incivilities that disrupt the public order; perception of the presence of problematic categories

of persons; perception of police visibility. The questions referring to police visibility used in questionnaire are following: when did you last see police officers in your neighbourhood a) patrolling by car b) patrolling on foot and c) dealing towards persons disrupting public order. The respondents were offered answers on a scale from 1 – in the last seven days to 5 – never.

In addition to variables that measure police visibility, the questionnaire contained variables that measure fear of crime (feeling of safety at night in an apartment or house, as well as feeling of safety at night when moving about the neighbourhood). By using the factor analysis of the questionnaire (Borovec, 2013), it was determined that fear of crime is also defined by variables that refer to the assessment of one's abilities to protect oneself from physical attack, as well as to protect one's property due to the projection of these variables on fear of crime. The perception of crime risk and frequency was assessed based on four questions referring to the crime frequency in the place of residence, and in relation to the Republic of Croatia, as well as to crime victimisation risk in the place of residence, and what the assessment is like compared to the entire country. The perception of incivilities was assessed based on questions referring to the presence of risk groups committing various types of crime and based on questions referring to incidents related to disrupting public order in a community (twenty-two questions in total). The questionnaire used in this survey has proven its validity (clear and interpretable latent structure), as well as good metric characteristics. The Cronbach-Kaiser-Caffrey  $\alpha$  reliability coefficient amounts to 0.965 (Borovec, 2013).

In order to examine the relation between police visibility and sense of safety (fear of crime, perception of crime risk and frequency, perception of incivilities), the multivariate regression analysis was used. This analysis will provide an answer to the question to what extent police visibility accounts for each of the criteria variables, as well as which of them accounts best for certain criteria. After the regression analysis, a quasi-canonical correlation analysis (Momirović, Dobrić, & Karaman, 1983, 1984) was applied, as an alternative method that is less sensitive to respondent samples described by category variables than the "classic" canonical correlation analysis. Since the aim of the research was to determine how various aspects of police visibility influence the sense of safety, when analysing data, police visibility variables were used as manifest variables, and not as a unique factor, whereas fear of crime, perception of crime risk and frequency, as well as perception of incivilities were considered latent dimensions obtained by factorising the questionnaire. The SPSS application was used to statistically process the data.

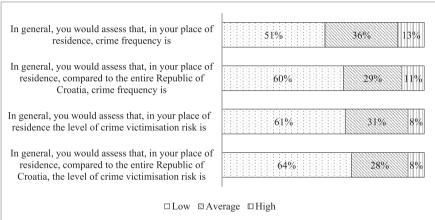
# 6 RESEARCH RESULTS

# 6.1 Descriptive Analysis of Research Results

Before presenting the results of the regression and quasi-canonical analyses, an overview of the research results acquired by a descriptive analysis is provided. The first results refer to the perception of crime frequency and victimisation risk according to the assessment of the citizens of the Republic of Croatia.

In order to do so, respondents were asked to assess crime and crime victimisation risk in their place of residence, as well as to compare them with the average for the Republic of Croatia. Answers to that question are depicted in Figure 2, where the relative shares of respondent answers are shown according to the categories – 1-low, 2-average and 3-high. Slightly over half of citizens perceive crime frequency in their place of residence to be low, while 13 per cent of citizens perceive it to be high. However, the perception of crime victimisation risk is lower (slightly under two-thirds of respondents perceive it as low, and less than a tenth of respondents perceive it as high).

Figure 2:
Distribution
of relative
frequencies:
- Perception
of crime
victimisation
risk and
frequency



When the respondents were asked to assess the same elements compared to the average of the Republic of Croatia, two-thirds of the respondents assessed victimisation risk to be lower than the average, whereas 60 per cent assessed crime frequency to be lower compared to the average of the Republic of Croatia. This can mostly be attributed to the consequences of media influences on public opinion. Citizens receive information on crime occurring outside of their place of residence mostly through the media, which is understandable since this type of crime does not belong to citizens' personal experience or experience of people from living in their surroundings. Media coverage of crime and the general state of society provide a significantly poorer image than the image based on precise data and actual events, meaning that citizens assume that these occurrences take place somewhere else in the country. The media image of crime does not reflect reality since the media, according to certain criteria, select the events they are going to present and decide how much space is going to be devoted to specific occurrences (Pollak & Kubrin, 2007). These results confirm the research results on the perception of crime as a significantly greater problem at the national than at the local level (Thorpe & Hall, 2009; Walker, Kershaw, & Nicholas, 2006;).

Furthermore, sense of safety is represented in Figure 3, which contains the relative frequencies divided into the following categories: 1-highly unsafe/I cannot protect myself at all, 2-mostly unsafe/I mostly cannot protect myself, 3-mostly safe/I mostly can protect myself, 4-completely safe/I can completely protect myself. A large majority of Croatian citizens (92 per cent) feels safe at

night when alone in their apartment/house. A slightly smaller number, yet still a vast majority (85 per cent), feels safe even when moving about alone at night in their neighbourhood. In addition to the feeling of safety, the perceptions of self-protection abilities and of protection of property in case of a physical assault were examined. The results show that these assessments are quite similar, whereby the ability to protect property is slightly higher than the possibility of self-protection. It is fully understandable that respondents feel safer in their own home than outside since fear of crime can, among other things, be related to fear of strangers (Borooah & Carcach, 1997) that citizens more frequently encounter in public spaces. Moreover, the assessment of the ability to protect oneself from a physical assault is higher in one's own home.

More than two thirds of citizens (65 per cent) believe that they can protect themselves from physical assault, while a slightly larger number (66 per cent) believes in being able to protect their property. Approximately a third of the respondents perceives that they cannot protect themselves or their property.

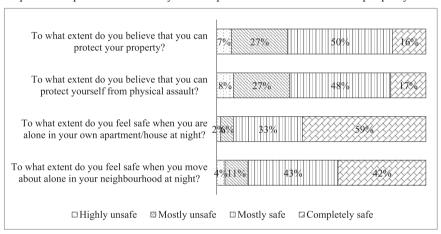
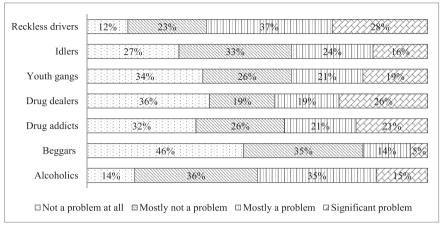


Figure 3: Distribution of relative frequencies: Feeling of safety and assessment of self-protection ability

The survey also included the area of incivilities, i.e. to what extent citizens of the Republic of Croatia perceive different categories of persons as a problem in their place of residence (Figure 4). The results show that undisciplined and reckless drivers are considered to be the greatest problem, i.e. two-thirds of respondents (65 per cent) perceive them in that way. The second most frequent problem are persons under the influence of alcohol (according to 50 per cent of citizens), followed by drug dealers and drug addicts (45 per cent and 42 per cent), as well as youth gangs and dealers (40 per cent). On the other hand, beggars are not perceived as a problem (19 per cent), while gangs and drug dealers which can related to criminal behaviour are perceived as high risk. It can be concluded that citizens are more bothered by deviant persons (reckless drivers and alcoholics) given that they encounter such types of behaviour almost on a daily basis, and less by persons exhibiting criminal behaviour.

Figure 4:
Distribution
of relative
frequencies:
To what
extent do the
stated groups
of persons
represent a
problem in
your place of
residence?



In addition to the perception of to what extent certain groups of persons represent a problem in their place of residence, examined was the perception of the prominence of incivilities related to their various forms (Figure 5). Improper vehicle parking is the most common problem encountered by the respondents – slightly over half of them (54 per cent) encounter this problem frequently or almost on a daily basis. This is followed by littered streets and green areas (problem encountered frequently/almost on a daily basis by over one-third of citizens), damage to private and public property, as well as excessive drinking and drug abuse in the streets, which over a third of citizens consider a problem (35 per cent and 34 per cent), noise at night (31 per cent), juvenile incidents (30 per cent), as well as dangerous dogs and violence among people (every fourth respondent). Prostitution is the least prominent problem – the majority of respondents (70 per cent) has never encountered this problem in their place of residence. The described perception of respondents related to negative occurrences in their place of residence and to risk groups of persons is mostly affected by respondents' personal experience in their place of residence. Such information is rarely reported by the media, however, since in question are repeated or constantly present problems in local communities, citizens notice them more or less frequently depending on their intensity, which obviously affects their quality of life and their satisfaction with their place of residence. It is, therefore, understandable that citizens frequently or almost on a daily basis notice problems and occurrences related to their physical environment (improper parking, littered surroundings, damaged public property), whereas behaviours related to the erosion of social relationships and moral values (prostitution, discrimination, animal cruelty, burglaries/robberies and violence) are less often noticed.

The frequent occurrence of behaviours that disrupt the public order, i.e. the presence of undesired occurrences and risk groups of persons is perceived by citizens as a threat to the norm and value system which they rely on (Borovec & Cajner Mraović, 2010).

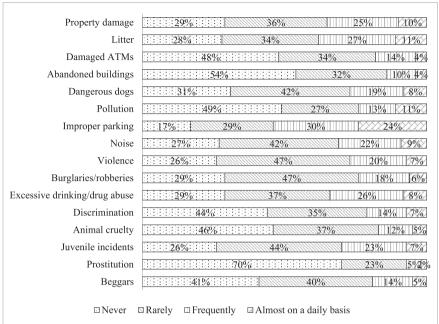


Figure 5: Distribution of relative frequencies: How often do the stated occurrences appear in your place of residence?

The results of answer frequencies related to visibility of police dealings are depicted in Figure 6. According to the respondents, police car patrols are the most frequently noticed police activity – within one month prior to the beginning of the research, two-thirds of citizens (almost half of them within one week prior to the beginning of the research) noticed the activity, while foot patrols and dealings towards persons disrupting public order were noticed only by approximately one-fourth of the respondents over the same period.

It should be emphasised that nearly half of citizens has never seen police officers patrolling on foot in their neighbourhood. A fourth of citizens has never seen police dealings towards persons disrupting public order. Since the organisation of police work in patrol areas is, in most part, based on car patrols, and, only in less part, on foot patrols, the results obtained are completely realistic and expected.

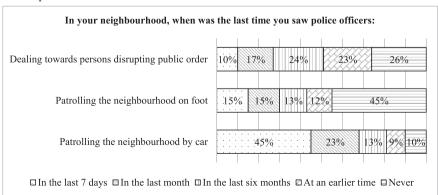


Figure 6: Distribution of relative frequencies: Police visibility

# 6.2 Results of Regression and Quasi-Canonical Analyses

Regression analysis (Mejovšek, 2008) is used to determine the relation between a set of independent variables and one dependent variable. In this analysis, the key coefficients are the multiple correlation (R) and  $\beta$  coefficients (standardised coefficients of partial regression). The multiple correlation shows the level of relation between a set of predictors and a criteria variable, as well as provides data on the value of the entire system of predictors in predicting a criteria variable. Each predictor has a  $\beta$  coefficient that explains the share of a predictor in predicting criteria, i.e. shows a special share of a particular predictor in explaining the common variance of a set of predictors and criteria.

In the first regression analysis (Table 1), fear of crime is a dependent or criteria variable, whereas variables defining police visibility are independent variables or predictors.

Table 1: Multiple regression analysis for the criterion: Fear of crime

Predictors	В	Std. error β	р
Patrolling the neighbourhood by car	-0.223	0.32	0.000
Patrolling the neighbourhood on foot	-0.011	0.34	0.688
Dealings towards persons disrupting public order in the neighbourhood 0.092 0.34 0.007			
$R = 0.215$ ; $R^2 = 0.046$ ; $F(3) = 16.414$ ; $p < 0.001$ ; Std. error 0.977			

It is visible from Table 1 that the regression of predictor variables on fear of crime is statistically significant because p < 0.001. The coefficient of multiple correlation (R) amounts to 0.215 and the coefficient of determination ( $R^2$ ) amounts to 4.6 per cent, meaning that 4.6 per cent of criteria variance was explained by predictors. The "patrolling the neighbourhood by car" variable, with a regression coefficient of -0.223, participated most in predicting the results for the "fear of crime" variable. In addition, participating in the prediction, according to its strength, is the "dealings towards persons disrupting public order in the neighbourhood" variable, whose standardised regression coefficient amounts to 0.092. Based on the negative sign of the coefficient and the way in which the predictors are scaled, i.e. the way in which the degrees on the scale are defined, the negative sign means that seeing the police patrolling the neighbourhood by car more often is related to a higher level of fear of crime. On the other hand, more frequent police dealings towards persons disrupting public order in the neighbourhood have a positive impact on reducing fear of crime. Participating least in predicting the criteria is the "patrolling the neighbourhood on foot" variable ( $\beta$  = -0.011), which was shown to be a statistically insignificant predictor.

In the following regression analysis (Table 2), the dependent or criteria variable is perception of incivilities.

All predictions of multiple regression in relations to normal distribution of results are met. During the analysis the colinearity of predictors was also tested, but no significant linear relationshiop was found.

Predictors	В	Std. error β	p
Patrolling the neighbourhood by car	0.171	0.32	0.000
Patrolling the neighbourhood on foot	-0.160	0.34	0.000
Dealings towards persons disrupting public order in the neighbourhood	-0.034	0.34	0.329

R = 0.202;  $R^2 = 0.041$ ; F(3) = 14.509; p < 0.001; Std. error = 0.979

Table 2: Multiple regression analysis for the criterion: Perception of incivilities

The regression of predictor variables on incivilities, as visible in Table 2, is statistically significant and it amounts to p < 0.001. The coefficient of multiple correlation (R) amounts to 0.202, and the coefficient of determination ( $R^2$ ) amounts to 0.041, i.e. predictors account for 4.1 per cent of criteria variance. Of the three predictors, two had a statistically significant regression coefficient amounting to p < 0.01, whereas the "police dealings towards persons disrupting public order in the neighbourhood" criterion has proven to be statistically insignificant (p > 0.05). The "patrolling the neighbourhood by car" variable, with a regression coefficient of 0.171, participates mostly in predicting the results for the "perception of incivilities" variable. According to strength, it is followed by "patrolling the neighbourhood on foot" variable, whose standardised regression coefficient amounts to -0.160. According to the sign of the coefficient and the way in which the degrees on the scale are defined, it can be concluded that seeing police patrolling the neighbourhood by car more often is related to a higher perception of incivilities. However, seeing the police patrolling the neighbourhood by foot more often is related to a lower perception of incivilities.

The perception of crime risk and frequency as a component of the sense of safety was also used as a criteria variable in the regression analysis. The results obtained are presented in Table 3.

Predictors	В	Std. error β	р
Patrolling the neighbourhood by car	0.145	0.32	0.000
Patrolling the neighbourhood on foot	-0.145	0.34	0.000
Dealings towards persons disrupting public order in the neighbourhood	-0.097	0.34	0.005

R = 0.208;  $R^2 = 0.043$ ; F(3) = 15.355; p < 0.001; Std. error = 0.978

Multiple regression analysis for the criterion: Perception of crime risk and frequency

Table 3:

In this case as well, the regression of predictor variable on the "perception of crime risk and frequency" criterion is statistically significant because p < 0.001 per cent. The coefficient of multiple correlation (R) amounts to 0.208, whereas the percentage of the common variance ( $R^2$ ) is 4.3 per cent. Again, a large proportion of the variance has remained unexplained, meaning that police visibility can only, to a very limited extent, influence citizens' perception of victimisation risk and perception of crime frequency. Based on the results  $R^2$  variance explained is very low and there are mostly other indicators that influenced these perceptions. In

this case, all predictors are statistically significant because p < 0.05. In predicting the results for the "perception of crime risk and frequency" variable, participating equally are the "patrolling the neighbourhood by car" variable, whose regression coefficient amounts to 0.145, and "patrolling the neighbourhood on foot" variable,  $\beta$ =-0.145. However, their regression coefficients have a different sign. In predicting the perception of crime risk and frequency, participating also is the third predictor "dealings towards persons disrupting public order in the neighbourhood", whose standardised regression coefficient amounts to -0.097. Taking into consideration the sign of the coefficient and the way in which the predictors are scaled, it can be concluded that seeing the police patrolling the neighbourhood by car more frequently is related to a higher level of perception of crime risk and perception of crime frequency. On the other hand, seeing police patrolling the neighbourhood on foot more frequently, as well as dealings towards persons disrupting public order in the neighbourhood, have a positive influence on diminishing perceived crime risk and frequency.

Table 4 provides a clear overview of how predictors and statistically significant criteria are related.

Table 4: Relation between predictors and criteria

organizativ criteria are related.			
Predictors	Criteria		
Patrolling the neighbourhood by car more frequently	<ul> <li>Increased fear of crime</li> <li>Increased perception of incivilities</li> <li>Increased perception of crime risk and frequency</li> </ul>		
Patrolling the neighbourhood on foot more frequently	<ul> <li>Decreased perception of incivilities</li> <li>Decreased perception of crime risk and frequency</li> </ul>		
More frequent dealings towards persons disrupting public order in the neighbourhood	Decreased fear of crime     Decreased perception of crime risk and frequency		

Canonical analysis is a complex statistical procedure, whose result is the canonical correlation that represents the maximum correlation between two sets of variables. This correlation is calculated between sets of linear combinations of variables in both sets of variables. However, when data of "lower quality"2 are used, as is the case in this research, it is more suitable to use the canonical covariance analysis or quasi-canonical correlation analysis (Momirović et al., 1983). The canonical covariance analysis is a robust method that is adapted for data at the level of nominal and ordinal scales, and is comprised of maximising covariances of linear composites of two sets of variables. Furthermore, a normal distribution of data is not a condition. Mejovšek (2008) emphasises that the method is not sensitive to higher levels of relationships between variables from two different sets. In addition, the method allows for a non-orthogonal relationship of latent dimensions and, along with the structure of quasi-canonical factors (orthogonal projections of variables on quasi-canonical factors, which are actually correlations of variables and quasi-canonical factors), there is also a pattern of quasi-canonical factors (parallel projection of variables on quasi-canonical factors).

<sup>2</sup> In the research and processing of data the Likert type variables were used which are not equally scaled, i.e. they do not have the same number of categories and the relations among those categories are not unified. Because of the mentioned, Quasi-canonical correlation analysis was used as a method, because it is less sensitive to processing such data.

In order to determine the relationship between the components of police visibility and the sense of safety, conducted was a spectral decomposition of square matrix of covariances between the mentioned set of variables, as presented in Table 5.

	Eigenvalues	Cumulative variance	% of common variance
1.	0.07973	0.07973	2.66
2.	0.03133	0.11106	3.70
3.	0.00127	0.11233	3.74

Table 5: Eigenvalues of the covariance matrix of police visibility and sense of safety

The results show that a significant quasi-canonical component was extracted, whose covariance amounts to 0.08 (explained in detailed in Table 7). It is a low correlation, and the results indicate that the first pair of quasi-canonical factors of the two sets of variables, which points to what is important for their relationship, explains 2.66 per cent of the common variance. The quasi-canonical correlations were calculated for the significant quasi-canonical component. The results of the testing of the significance of the quasi-canonical correlations<sup>3</sup> are presented in Table 6.

Component	Quasi-canonical cor- relation	Quasi-canonical covariance	HI**2	DF	Significance P
1.	0.25	0.08	70.32	4	0.000

The correlation of the significant quasi-canonical component amounts to 0.25, while the quasi-canonical correlation (0.08) is statistically significant, with p < 0.01 per cent. It can be claimed that there is a relationship between police visibility and sense of safety over one significant quasi-canonical component. Therefore, the analysis of the structure of the quasi-canonical variable can be conducted.

Table 7 presents parallel projections and correlations of variables (matrices of pattern and structure are identical and therefore not shown separately) that define police visibility on the quasi-canonical component extracted from that set of variables and from the other set of variables (sense of safety).

Variables	Parallel projections and correlations of variables of the first set on components extracted from set 1	Parallel projections and correlations of variables of the first set on components extrac- ted from set 2
Patrolling the neighbourhood by car	0.50	0.16
Patrolling the neighbourhood on foot	-0.58	-0.12
Dealings towards persons disrupting public order in the neighbourhood	-0.50	-0.09

Table 6.
Testing of the significance of the quasi-canonical coefficients of police visibility and sense of safety

Table 7:
Matrices of
pattern/structure of the first
set of variables:
Police
visibility

Based on the results presented in Table 7, it is possible to determine variables belonging to police visibility that are responsible for the relationship with the sense of safety set of variables. The first among them is the "patrolling the neighbourhood by car" variable, whose parallel projection and correlation

<sup>3</sup> In a Quasi-canonical analysis Quasi-canonical covariance is a parametar corresponding to Wilks Lambda in Canonical analysis.

on the component extracted from the sense of safety amount to 0.16. The next variable is "patrolling the neighbourhood on foot", whose parallel projection and correlation on the first component amount to -0.12. The third variable (dealings towards persons disrupting public order in the neighbourhood) has lower parallel projections and correlations on the first component extracted from the set of variables that describe the sense of safety. In other words, the result shows that the perception of the police patrolling the neighbourhood by car less frequently and on foot more frequently are the most significant for relating police visibility with a positive sense of safety (lower level of fear of crime, perception of lower crime risk and frequency and lower level of incivilities).

Furthermore, it was analysed which sense of safety variables most significantly create the quasi-canonical component. Table 8 presents the parallel projections and correlations of variables that define the sense of safety on the quasi-canonical component extracted from that set of variables and from the other set of variables (police visibility).

Table 8: Matrices of pattern/structure of the second set of variables: Perception of safety

Variables	Parallel projections and cor- relations of variables of the second set on components extracted from set 2	Parallel projections and cor- relations of variables of the second set on components extracted from set 1
Fear of crime	-0.63	-0.15
Perception of incivilities	0.78	0.19
Perception of crime risk and frequency	0.79	0.20

By examining Table 8, which represents the matrix pattern and the matrix structure of the second set of variables, it is possible to determine the sense of safety variables that are responsible for the relationship with the police visibility set of variables. In this case, these are all three variables, whereby the first among them is "perception of crime risk and frequency", whose parallel projection and correlation on the first component amount to 0.20. It is followed by the "perception of incivilities" variable, whose parallel projection and correlation on the first component amount to 0.19 and by the "fear of crime" variable that has somewhat lower parallel projections and correlations on the first component extracted from the set of variables that describe police visibility. This result means that all aspects of subjective sense of safety are significantly related to police visibility.

In conclusion, the first pair of quasi-canonical factors in police visibility is defined by variables that refer to patrolling the neighbourhood by car and patrolling the neighbourhood on foot, whereby the first pair of quasi-canonical factors in sense of safety is defined by perception of crime risk and frequency, perception of incivilities and fear of crime. These results show that the perception of the police patrolling the neighbourhood on foot more frequently and by car less frequently is related to a higher sense of safety, i.e. lower perception of crime risk and frequency, as well as incivilities is related to higher police visibility.

Based on the results obtained, it can be concluded that the hypothesis set in this research was confirmed, however, not completely. There is a statistically significant relation between police visibility and citizens' sense of safety; however, the relation of various aspects of visibility has different signs in relation to sense of

safety. Visibility of police car patrols has an unfavourable effect on all aspects of the sense of safety, whereas visibility of police foot patrols and visibility of police interventions have a positive influence on the majority, yet not on all aspects of the sense of safety. Visible police foot patrols diminish the cognitive perception of the lack of safety (perception of crime frequency, victimisation risk and incivilities), whereas visible police dealings towards persons disrupting public order diminish fear of crime, as well as the perception of crime risk and frequency.

# 7 DISCUSSION AND CONCLUSION

The traditional and conventional response of the police to an increase in citizens' feeling unsafe is to increase police presence and visibility (Grabosky, 1995). However, this research points out that such an approach does not necessarily produce positive effects, i.e. it can, depending on police tactics, make the situation even worse. The research results indicate that there is a complex relationship between visibility and citizens' affective and cognitive perception of safety. On the one hand, certain aspects of police visibility have a positive effect on the perception of safety; on the other hand, others are related contrary to expectations. Data can be interpreted in favour of visibility of foot patrols and police interventions having the most significant influence on the sense of safety, while visibility of police car patrols has a negative influence on citizens' perception of safety. In other words, all police efforts aimed at increasing activities related to foot patrols and to dealings towards risk groups are important in achieving a better perception of safety. However, it should be pointed out that the strength of the relationship, although statistically significant, is relatively low. To put it differently, police visibility will, only to a limited extent, influence citizens' feeling of safety. As Salmi et al. (2004) have determined, and which this research has confirmed, police visibility is important for the sense of safety. The increase in the number of foot patrols will reduce fear of crime (Grabosky, 1995), and enhance the feeling of safety in general (Office for National Statistics, 2014). However, although police visibility has a significant influence, it does not have a strong influence on citizens' subjective safety, which it influences only to a smaller extent. If citizens see police patrolling on foot, which enables direct contact with police officers, and if citizens see police dealings towards persons disrupting public order, this will positively influence citizens' sense of safety.

It is important to bear in mind that sense of safety is based on perception, in the same ways as assessment of the police and its visibility. Perception being so important, police efforts to reduce fear of crime or perception of crime risk and frequency, and incivilities will not be effective if they remain unnoticed by citizens. Obviously, the question arises how often citizens should see the police in order to perceive it as an integral part of everyday life in their neighbourhoods. Although police presence in the community through various patrolling techniques is often encouraged, still prevailing in Croatia is coverage of urban and rural areas by car patrols, which is significant in the context of the results obtained.

Although this was not the subject of this research, it should be mentioned that police visibility should not be viewed exclusively in isolation, but rather in the

context of the place or area police visibility is aimed at, and in relation to concrete tactics used by police patrols and in relation to the way they deal with citizens. In addition, other possible advantages of increased police visibility should be taken into consideration. On the one hand, it is prevention, i.e. reduction in the number of criminal offences committed (reported crime), and on the other hand there are possible positive influences on citizens' opinion on police and perception of police effectiveness, which can encourage citizens to report criminal offences and, in that way, reduce the dark crime figures. In other words, the assumption that police visibility could encourage to cooperate more with the police should not be neglected, which is particularly important in light of new concepts of policing, such as Community policing, problem-solving policing and the like. This is also confirmed by the research conducted by other authors (Sherman & Eck, 2002; Weisburd & Eck, 2004), which shows that visible police patrols can reduce crime, provided they are aimed at crime hotspots (high crime locations). To put it differently, random or reactive patrolling when police officers patrol a specific area and wait for citizens' calls for interventions, without being concentrated on high crime or anti-social behaviour locations, will not have a positive impact on reducing crime. Kelling, Pate, Dieckman, & Brown (1974) confirmed that random patrols do not have an influence on crime and fear of crime. If police patrols are focused on problem areas, it is much more likely that they will be effective. In addition, goal-oriented foot patrols might have a positive effect on citizens' perception of the police (Dalgleish & Myhill, 2004; Office for National Statistics, 2014) and on reducing crime (Koper, 1995). Besides raising citizens' level of trust in the police, as well as reducing crime, foot patrols could potentially have a positive influence on citizens' perception of crime and sense of safety if the problem-solving approach is applied, and if the engagement of the local community in solving safety problems together with the police is encouraged (Tuffin, Morris, & Poole, 2006).

The results obtained point to a whole range of important implications both for police policies and police practice. First of all, citizens' sense of safety is a complex construct and police tactics must not be reduced only to increasing police presence in communities since a large share of the variance of the sense of safety is explained by other predictors, many of them not being within the scope and under the influence of the police. For instance, this can refer to some individual characteristics of citizens, factors that affect their increased vulnerability or diminished capacities to protect themselves from crime victimisation, as well as numerous factors in local communities. For that reason, reducing citizens' perception of feeling unsafe should be one of the main, yet not the only police priority. However, realistic goals and promises should be set and given to citizens because unrealistic promises, if not fulfilled, can result in disappointment. Moreover, the feeling of lack of safety should not be viewed only negatively since a certain level or amount of fear is an important survival and defence mechanism, which encourages citizens to take care of and take on measures to ensure their safety.

Furthermore, decision-makers in the police must develop strategies to improve not only police visibility, but strategies that will mostly be based on foot patrols. Given the fact that police work cannot be organised exclusively on foot, in

all situations that allow for it, car patrols should be combined with periods when police officers exit the car, patrol certain areas on foot and have direct contact with citizens, particularly in non-incident situations. What is more, police strategies must be planned in a way that certain activities result in multiple positive effects. Within this context, the effects of those activities aimed at increasing police visibility should also be expected in terms of reducing crime incidents or certain types of criminal offences, of influencing the positive perception of the police, as well as of reducing citizens' feeling of lack of safety.

The importance of direct contact between citizens and the police that is more frequent when police officers patrol on foot, should not be underestimated. The largest number of characteristics that influence citizens' feeling of satisfaction when encountering the police is related to the manner in which the police behave on site. This includes friendliness, willingness to help, fairness, attention when listening to citizens, and willingness to explain to citizens what exactly is going on.

Finally, some restrictions of this research should also be mentioned. First of all, the research can be understood as an attempt to explain fear of crime through police visibility. However, the results lead to a conclusion that there is a whole range of other, probably even stronger, predictors of the feeling of safety, which were not taken into account in this research. Moreover, a possible problem of this research might be the fact that assessments of both predictor and criteria variables were obtained from the same source. This might have caused a higher level of relations than exist in reality (so-called effect of method variance). In order to additionally test the results obtained, further research in which the criteria and predictor variables will be assessed in various contexts is necessary.

# REFERENCES

- Borooah, V. K., & Carcach, C. A. (1997). Crime and fear: Evidence from Australia. *The British Journal of Criminology*, *37*(4), 635–657.
- Borovec, K., & Cajner Mraović, I. (2010). Strah od nasilja i kriminala na području Županije osječko-baranjske [Fear of violence and crime in the Osječko-Baranjska County]. In D. Šincek (Ed.), Zbornik radova, 3. Znanstveno-stručnog skupa posvećenog pitanjima nasilja, Psihosocijalni aspekti nasilja u suvremenom društvu izazov obitelji, školi i zajednici (pp. 11–25). Osijek: Sveučilište Josipa Juraja Strossmayera u Osijeku.
- Borovec, K. (2013). *Strategija Policija u zajednici i njezin utjecaj na strah od kriminala, percepciju kriminaliteta i javnog nereda u Hrvatskoj (Doktorska disertacija)* [Community policing strategy and it's influence on fear of crime, perception of crime and incivilities in Croatia] (Doctoral dissertation). Zagreb: Edukacijsko-rehabilitacijski fakultet.
- Brown, L. P., & Wycoff, M. A. (1996). Policing Houston: Reducing fear and improving service. *Crime & Delinquency*, 33(1), 71–89.
- Bureau of Justice Assistance. (1994). *Understanding community policing A framework for action*. Washington: Bureau of Justice Assistance. Retrieved from https://www.ncjrs.gov/pdffiles/commp.pdf

- Cao, L., Frank, J., & Cullen, F. T. (1996). Race, community context and confidence in the police. *American Journal of Police*, 15(1), 3–22.
- Church Council on Justice and Corrections. (1995). *Fear of crime in Canada: Taking the puls of nation*. Ottawa: Church Council on Justice and Corrections.
- Cordner, G. (2010). *Reducing fear of crime, strategies for police*. US Department of Justice, Retrieved from https://cops.usdoj.gov/RIC/Publications/cops-p173-pub.pdf
- Čular, G. (2005). *Izbori i konsolidacija demokracije u Hrvatskoj* [Elections and consolidation of democration in Croatia]. Zagreb: Fakultet političkih znanosti.
- Dalgleish, D., & Myhill, A. (2004). *Reassuring the public: A review of international policing interventions*. London: Home Office.
- Doležal, D. (2009). Razumijevanje straha od kriminaliteta [Understanding fear of crime]. *Hrvatska revija za rehabilitacijska istraživanja*, 45(2), 1–14.
- Dubois, J. (2002). *Media coverage of organized crime: Impact on public opinion, University du Quebec a Montreal.* Ottawa: Royal Canadian Mounted Police. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.554.9597&rep=rep1&type=pdf
- Ent, C., & Hendricks, J. E. (1991). Bicycle patrol: A community policing alternative. *Police Chief*, 58(11), 58–60.
- Ferraro, N. (1995). Fear of crime: Interpreting victimisation risk. New York: Suny Press.
- Ferraro, K. F., & LaGrange, R. (1987). The measurement of fear of crime. *Sociological Inquiry*, 57(1), 70–97.
- Fielding, N., & Innes, M. (2006). Reassurance policing, community policing and measuring police performance. *Policing and Society*, 16(2), 127–145.
- Fleissner, D., & Heinzelmann, F. (1996). Crime prevention through environmental design and community policing. *National Institute of Justice: Research in Action*, (Aug.), 1–4. Retrieved from https://www.ncjrs.gov/pdffiles/crimepre.pdf
- Franc, R., Ivičić, I., & Šakić, V. (2007). Kriminal i nasilje kao društveni problem percepcija javnosti [Crime and violence as a problem in our society public perception]. In V. Kolesarić (Ed.), *Zbornik radova znanstveno-stručnog skupa Psihologija nasilja i zlostavljanja* (pp. 103–117). Osijek: Sveučilište Josip Juraj Strossmayer u Osijeku.
- Gabriel, U., & Greve, W. (2003). The psychology of fear of crime: Conceptual and methodological perspectives. *British Journal of Criminology*, 43(3), 600–614.
- Galić, R., Ljubotina, D., Matić, R., Matešković, D., & Ninić, A. (2009). *Mladi i sigurnost: Osjećaju li se mladi sigurno u Gradu Zagrebu: Rezultati istraživanja* [Youth and safety: Do young people feel safe in the City of Zagreb: The results from research]. Zagreb: Gradski ured za socijalnu zaštitu i osobe s invaliditetom.
- Glasnović Gjoni, V. (2006). Strah od kriminala: Obilježja spola i dobi [Fear of crime: Gender and age characteristics]. *Hrvatski ljetopis za kazneno pravo i praksu, 13*(1), 171–187.
- Grabosky, P. N. (1995). Fear of crime and fear reduction strategies (Trends & issues in crime and criminal justice, no. 44). Canberra: Australian Institute of Criminology. Retrieved from https://aic.gov.au/publications/tandi/tandi/44
- Herrington, V., & Millie, A. (2006). Applying reassurance policing: Is it business as usual? *Policing and Society*, 16(2), 146–163.

- Holmberg, L. (2005). Policing and the feeling of safety: The rise (and fail?) of community policing in the Nordic countries. *Journal of Scandinavian Studies of Criminology and Crime Prevention*, 5(2), 205–219.
- International Institute for Democracy and Electoral Assistance. (2002). South Eastern Europe public agenda survey, complete quantitative survey results. Retrieved from http://archive.idea.int/balkans/survey\_detailed.cfm
- Jackson, J., & Bradford, B. (2009). Crime, policing and social order: On the expressive nature of public confidence in policing. *The British Journal of Sociology*, 60(3), 493–521.
- John Howard Society of Alberta. (1999). *Fear of crime*. Retrived from https://johnhoward.ab.ca/wp-content/uploads/docs/FearofCrime\_1999.pdf
- Kelling, G. L., Pate, T., Dieckman, D., & Brown, C. E. (1974). *The Kansas City preventive patrol experiment: Technical report*. Washington: Police Foundation.
- Koper, C. S. (1995). Just enough police presence: Reducing crime and disorderly behavior by optimizing patrol time in crime hotspots. *Justice Quaterly*, 12(4), 649–672.
- McLaughlin, E. (Ed.). (2001). The Sage dictionary of criminology. London: Sage.
- Mejovšek, M. (2008). *Metode znanstvenog istraživanja u društvenim i humanističkim znanostima* [Scientific research methods in social sciences and humanities]. Zagreb: Naklada Slap.
- Meško, G., & Kovčo, I. (1999). Strah pred kriminaliteto v Sloveniji in Hrvaški [Fear of crime in Slovenia and Croatia]. *Varstvoslovje*, 1(2), 26–30.
- Momirović, K, Dobrić, V., & Karaman, Ž. (1983). Canonical covariance analysis. In *Proceedings of 5th International Symposium "Computer at the University"* (pp. 463–473). Cavtat: Sveučilišni računski centar.
- Momirović, K., Dobrić, V., & Karaman, Ž. (1984). On a robust procedure for the analysis of relationship between two sets of variables. Paper presented at 7<sup>th</sup> Congress of Balkan Mathematicians, Athene.
- Mouhanna, C. (2007). Kako se nositi s neuspjesima: Potreba za promjenom [How to cope with failures: The need for change]. In *Policija u zajednici* 2007–2010, 2. *regionalni forum* (pp. 195–198). Bern: Swiss Agency for Development.
- O'Connell, M. F. (1999). Is Irish public opinion towards crime distorted by media bias? *European Journal of Communication*, 14(2), 191–212.
- Office for National Statistics. (2014). *Public perceptions of the police, and police visibility,* 2012/13. Retrieved from https://www.ons.gov.uk/peoplepopulationand-community/crimeandjustice/compendium/crimestatisticsfocusonpublicperceptionsofcrimeandthepoliceandthepersonalwellbeingofvictims/2015-03-26/chapter1perceptionsofthepolice
- Paskell, C. (2007). "Plastic police" or "community support"? The role of police community support officers within low-income neighbourhoods. *European Urban and Regional Studies*, 14(4), 349–361. doi:10.1177/0969776407081167
- Pollak, J. M., & Kubrin, C. E. (2007). Crime in the news: How crimes, offenders and victims are portrayed in the media. *Journal of Criminal Justice and Popular Culture*, 14(1), 59–83. Retrieved from http://www.albany.edu/scj/jcjpc/vol14is1/pollak.pdf

- Robinson, M. B. (1998). High aesthetics/low incivilities: Criminal victimizations and perceptions of risk in downtown environment. *Journal of Security Administration*, 21(2), 19–32.
- Salmi, S., Grönroos, M., & Keskinen, E. (2004). The role of police visibility in fear of crime in Finland. *Policing: An International Journal of Police Strategies & Managment*, 27(4), 573–591.
- Schorer, P. (2007). Transformacija policije preko Policije u zajednici [Police transformation through community policing]. In *Policija u zajednici* 2007–2010, 2. *regionalni forum* (pp. 161–163). Bern: Swiss Agency for Development.
- Sherman, L. W., & Eck, J. (2002). Police for crime prevention. In L. W. Sherman, D. P. Farrington, B. C. Welsh, & D. L. MacKenzie (Eds.), *Evidence-based crime prevention* (pp. 295–329). London: Routledge.
- Silverman, E. B., & Della-Giustina, J. (2001). Urban policing and fear of crime. *Urban Studies*, 38(5–6), 941–957.
- Singer, M., Došen, A., Dundović, D., Dujmović, Z., Đanić, A., Mikšaj-Todorović, Lj., ... & Volarević, G. (2009). *Zagreb Siguran grad. Istraživački projekt* [City of Zagreb The safe city. Research Project]. Zagreb: Edukacijsko-rehabilitacijski fakultet.
- Šakić, I., Ivičić, I., & Franc, R. (2008). Extent of fear of crime in Croatia and effects of television viewing on fear of crime. Retrieved from https://www.bib.irb.hr/378908
- Teece, M., & Makkai, T. (2000). *Print media reporting on drugs and crime, 1995–1998* (Trends & issues in crime and criminal justice, no. 158). Canberra: Australian Institute of Criminology. Retrieved from http://www.aic.gov.au/publications/current%20series/tandi/141-160/tandi158.aspx
- Tuffin, R., Morris, J., & Poole, A. (2006). An evolution of the impact of the National Reassurance Policing Programme. London: Home Office.
- Thorpe, K., & Hall, P. (2009). Public perceptions. In A.Walker, J. Flatley, C. Kershaw, & D. Moon (Eds.), *Crime in England and Wales 2008/09. Vol. 1, Findings from the British Crime Survey and police recorded crime* (pp. 95–129). London: Home Office.
- Walker, A., Kershaw, C., & Nicholas, S. (2006). *Crime in England and Wales* 2005/06. London: Home Office.
- Walker, A., Flatley, J., Kershaw, C., & Moon, D. (Eds.) (2009). *Crime in England and Wales* 2008/09. London: Home Office.
- Warr, M. (2000). Fear of crime in the United States: Avenues for research and policy. *Criminal Justice*, 4(4), 451-489.
- Weisburd, D., & Eck, J. E. (2004). What can police do to reduce crime, disorder, and fear? *The Annals of the American Academy of Political and Social Science*, 593(1), 42–65. doi:10.1177/0002716203262548

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# Preventing Radicalisation and Extremism – The Views of Police Students in Croatia<sup>1,2</sup>

VARSTVOSLOVJE, Journal of Criminal Justice and Security, year 21 no. 2 pp. 161–183

# Branko Lobnikar, Irena Cajner Mraović, Kaja Prislan

# Purpose:

The paper presents approaches and strategies to preventing radicalisation in Croatia, police officers training, together with a study among police officers on preventing and deterring radicalisation in Croatia. The purpose of the paper is to present the context and the state-of-the-knowledge on preventing radicalisation, and moreover to analyse the approaches, police officers perceptions and training models on a national level.

# Design/Methods/Approach:

A study among 108 of students of the Police College, Ministry of the Interior of the Republic of Croatia, was conducted. The purpose was to analyse police officers' perceptions of the state of radicalisation in Croatia and effectiveness of multi-stakeholder and cross-sectoral approach to preventing radicalisation and violent extremism in Croatia. Another study aim was to evaluate whether, using a proposed training design, it is possible to strengthen the notion of institutional interdependence in police officers' efforts in the area of facilitating and supporting disengagement from radicalisation. A questionnaire developed in the *First Line* project dedicated to the training of various stakeholders in preventing radicalisation was used before and after the training.

# Findings:

The findings of our study on preventing and deterring radicalisation in Croatia show that the tackling and prevention of violent extremism and terrorism is largely seen as being top-down-oriented by the respondents, driven by the nation state and the main task of security sector agencies, namely the government, intelligence services and specialised police units. It is also important to mention that the police officers did not underestimated their own role and accountability at the local level for preventing radicalisation.

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<sup>2</sup> This paper is an extensive and in-depth version of the contributions presented at the 12th Crisis Management Days (27-29 May 2019) in Sibenik, Croatia, and at 6th Zagreb Police College Research Days in April 2019 in Zagreb, Croatia.

# Originality/Value:

Education and training in the area of preventing radicalisation is necessary for efficient collaboration between stakeholders. The study analysed the influence of proposed training model on practitioners' perceptions. While the participants in the study still mainly emphasize the role of security agencies, we established that appropriate training can strengthen the awareness of the interdependence of the various stakeholders engaged in these efforts. The study results are useful for police management to further strengthen the transfer of prevention strategies to local level and develop training models for various stakeholders.

# UDC: 351.741:343.3

**Keywords**: radicalisation, extremism, de-radicalisation, disengagement, training, Croatia, police

# Preprečevanje radikalizacije in ekstremizma na Hrvaškem stališča študentov Visoke policijske šole

# Namen prispevka:

Prispevek predstavlja pristope in strategije naslavljanja radikalizacije ter opisuje vsebino usposabljanja s področja preprečevanja radikalizacije policistov na Hrvaškem. Osrednji del prispevka predstavlja raziskava o stališčih policistov glede preprečevanja in odvračanja od radikalizacije na Hrvaškem. Namen prispevka je predstaviti aktualna znanja in pristope k preprečevanju radikalizacije ter analizirati nacionalne strategije, modele usposabljanja in stališča policistov o učinkovitosti pristopov.

### Metode:

Raziskava je bila izvedena na vzorcu 108 študentov (policistov) Visoke policijske šole Ministrstva za notranje zadeve Republike Hrvaške, s ciljem oceniti stališča policistov o stanju radikalizacije na Hrvaškem in učinkovitosti večdeležniškega ter medsektorskega pristopa k preprečevanju radikalizacije in nasilnega ekstremizma. Z raziskavo so avtorji ugotavljali tudi, ali je s pomočjo razvitega modela za usposabljanje policistov mogoče okrepiti njihovo zaznavo medinstitucionalne soodvisnosti pri izvajanju policijskega dela na področju preprečevanja radikalizacije.

# **Ugotovitve:**

Rezultati raziskave kažejo, da se po mnenju anketirancev pri preprečevanju radikalizacije na Hrvaškem spodbujajo in uporabljajo od zgoraj-navzdol usmerjeni pristopi, ki jih spodbuja država, med glavne deležnike pa umeščajo vlado in državne varnostne organizacije, še posebej obveščevalne službe in specializirane policijske enote. Na podlagi rezultatov so avtorji prispevka ugotovili, da policisti ne podcenjujejo svojega vpliva in dobro razumejo svojo vlogo pri preprečevanju radikalizacije na lokalni ravni.

# Izvirnost/pomembnost prispevka:

Izobraževanje in usposabljanje s področja preprečevanja radikalizacije e pomemben ukrep za vzpostavljanje učinkovitega sodelovanja med različnimi deležniki. V raziskavi so avtorji analizirali tudi vpliv izdelanega modela usposabljanja na stališča policistov in ugotovili, da lahko z ustreznim usposabljanjem okrepimo njihovo razumevanje in ozaveščenost o soodvisnosti med deležniki. Rezultati raziskave so uporabni predvsem za policijski management pri nadaljnjem razvoju preventivnih strategij in modelov usposabljanj za različne deležnike ter njihovem prenosu na lokalno raven.

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Ključne besede: radikalizacija, ekstremizem, deradikalizacija, odvračanje, usposabljanje, Hrvaška, policija

# 1 INTRODUCTION

Radicalisation and terrorism denote a serious security challenge common to both the European Union and the Western Balkans (European Council & Council of the European Union, 2018), whereas the latter is often presented as an origin region of radicalisation and violent extremism in Europe. Thus, the international community has recognised that better inter-agency coordination and cooperation on the regional and local levels with respect to counter-radicalisation initiatives is needed. Hereinafter, this paper analyses the basic concepts and context surrounding radicalisation process, counter-radicalisation and de-radicalisation strategies with an emphasis on multi-agency and community policing approach. Furthermore, we present the approaches and strategies to preventing radicalisation in Croatia, police officers training, together with a study among police officers on preventing and deterring radicalisation in Croatia. In the final section, the results in relation to international approaches are analysed, and the effects of the training determined. The purpose of the paper is to present the context and the state-of-the-knowledge on preventing radicalisation, and to analyse the approaches, police officers perceptions and training models on a national level.

# 2 RADICALISATION AND PREVENTION STRATEGIES

Although terms like radicalisation, extremism, violent extremism and terrorism are commonly used today, they are individual phenomena that represent different and complex concepts, are supported by different processes, and characterised by a variety of factors (Lombardi, 2015). According to the European Commission's Expert Group on Violent Radicalisation (2008), *radicalism* is advocacy of, and commitment to, sweeping change and the restructuring of political and social institutions. As an ideology, radicalism challenges the legitimacy of established norms and policies, but it does not necessarily lead to violence. People are considered radicals when they adopt radical beliefs, which happens through the processes of radicalisation. The European Commission defines *radicalisation* as a complex phenomenon of individuals or groups becoming intolerant with regard to basic democratic values such as equality and diversity, as well as a rising propensity to use means of force to reach political goals that negate and/or undermine

democracy (European Commission, 2018). Radicalisation is not necessarily a threat to society, especially if not connected to violence or other unlawful acts, such as incitement to hatred. The important link here is the fusion with a certain type of ideology that inherently denies individual freedom (or equal rights) to persons not part of the radical person's in-group. Only in this combination (i.e. behaviour determined by ideology based on inequality) should we recognise a radicalisation process as a threat to society, as well as a path in need of interruption by using various, individually tailored methods (Koehler, 2015). In connection to religious beliefs, radicalism is the concept closely related to fundamentalism, while terrorism differs from them significantly. From a process point of view (Lombardi, 2015), fundamentalism, radicalism and terrorism are linked, with terrorism being the final point of violent expression; however, these phenomena are dissimilar because the first two do not necessarily imply the use of violence, while terrorism is violent by nature. In this dynamic process from radicalism to terrorism, extremism and violent extremism occur as an intermediate stage. Extremism is understood as a consequence of radicalism and described by Neuman (2010) as opposing a society's core values and principles. This in fact could be applied to any ideology that advocates racial or religious supremacy and/or opposes the core principles of democracy and universal human rights. Extremist groups and parties tend to be anti-constitutional, antidemocratic, anti-pluralistic, fanatical, intolerant, non-compromising, single-minded, authoritarian and adhering to an ends-justify-the-means philosophy (Schmid, 2011). Moreover, violent extremism is regarded as the willingness to use violence, or to support its use, to further particular beliefs of a political, social, economic or ideological nature (De Leede, Haupfleisch, Korolkova, & Natter, 2017). Violent extremism therefore includes, but is not limited to, acts of terrorism (Nasser-Eddine, Garnham, Agostino, & Caluya, 2011).

Radicalisation is a complex and multifaceted phenomenon (Carpenter, Levitt, & Jacobson, 2009), which is always a consequence of various events and circumstances. Different factors on the individual-, group- and macro-levels push and pull a person to or from a violent extremist group (Prislan, Cernigoj, & Lobnikar, 2018). Certain factors might have traction, pulling the individual down a path of violent radicalisation, while other factors might make an individual more vulnerable, pushing him or her towards violent radicalisation (Organization for Security and Co-operation in Europe [OSCE], 2014). Thus, the causes of radicalisation that can lead to violent extremism and terrorism can be observed and studied at three levels: macro (i.e. political system, state power and control, relations in society), mezo (i.e. community, local environment and social groups) and micro (i.e. problems with identity, failed integration, feelings of alienation, marginalization, discrimination, relative deprivation, humiliation, stigmatization and rejection) (Schmid, 2013). Despite numerous studies in the area, there is no universal theory to describe radicalisation, as some circumstances and drivers that apply to certain groups are not applicable to others (Hutson, Long & Page 2009; Lowe, 2014). Thus, the radicalisation process is very much diverse - it can be short or long, depending on how many ties to the existing order the radicalising individual has. It can have several layers and take several

forms (socio-cultural, religious or ideological, and political) (Schmid, 2011). There are also multiple paths to radicalisation and individuals can exhibit both high and low levels of education, income, religious or political knowledge (Institute for Economics & Peace, 2017). As a result, research on motivation and processes of individual (de)radicalisation is still in its infancy (Koehler, 2015), while reliable empirical information and sophisticated theories about how radicalisation occurs, to whom, when, where and why, are not yet established (Wiktorowicz, 2005). Considering this diversity, various approaches to investigating the processes and factors of radicalisation have emerged. Social perspective for example focuses, among other things, on the mechanisms that facilitate the evolution of various grievances into terrorism, passing from individual to group extremism (McCauley & Moskalenko, 2008). Another path of the sociological research on radicalisation addresses the external conditions that can foster its occurrence. This manifests in in-depth studies of particular political and economic contexts and social classes in which extremist deviations are likely to flourish (Lowe, 2017). Trying to understand the psychological motivation of radicalised individuals is also seen as a valuable approach to uncover the root causes of violent extremism and terrorism (Moghaddam, 2005).

Current theorizing highlights the importance of situational factors as the essential drivers of radicalisation. As Schmid (2011) denotes the process often begins with a feeling of displacement (e.g. from migration), a feeling of relative deprivation (e.g. in relation to the host society) and a feeling of alienation and existential doubts. Persons deficient in material and social resources or lacking the community networks that would enable them to cope successfully with anxiety-producing situations are likely to experience increased social vulnerability (Cajner Mraović, Butorac, Lobnikar, & Žebec, 2018). In this sense, discrimination, human rights violations, relative deprivation, lack of access to education, social interactions, group dynamics and interpersonal relationships can play a significant role as pull factors (OSCE, 2014). Sageman (2008) for example also emphasizes the importance of interpersonal interactions among like-minded people as crucial for radicalisation to occur. This factor, labelled as "mobilization through networks" phenomenon involves validating and confirming one's ideas and interpretation of events with other radicalised people (Prislan et al., 2018). Likewise, Wiktorowicz (2005) when investigating radicalisation of Muslims in Great Britain, found that the process operates through networks of radicalised friends and family members, often following personal crisis and/or feelings of alienation brought on by perceptions of discrimination. Amongst young recruiters, drop-out rates from school and unemployment were for example identified as a push factor into violent extremism (Veenkamp & Zeiger, 2015). Young individuals "at-risk" are also very susceptible for online propaganda which is still an essential tool of terrorist and extremist groups for reaching out to audience for recruitment, radicalisation and fundraising (Europol, 2018).

Radicalism and violent extremism are phenomena dealt by counter-radicalisation and de-radicalisation strategies and processes. Below we provide an illustration of their fundamentals. *Counter-radicalisation* is a prevention strategy aimed at preventing violence and radicalisation. Here, non-violence still

prevails, but there is a risk of radicalisation and violent extremism (Clutterbuck, 2015). Counter-radicalisation measures contribute to objectives relating to the fight against radicalisation and refer to proactive initiatives that are targeted towards communities to reduce the potential risk of radicalisation, such as the mass distribution of counter-extremism messages (Bertram, 2015). Further, de-radicalisation strategies target already radicalised individuals and groups for whom the risk for violence is thus higher. De-radicalisation may be understood as the opposite of radicalisation (Demant & de Graaf, 2010; Della Porta & LaFree, 2012); it is a process of letting go of radical thoughts. The concept of de-radicalisation can be most broadly described as the activity of encouraging individuals, already characterised by extremist beliefs or violent religious or political ideologies, to adopt more moderate, non-violent views. Koehler (2015) states that de-radicalisation denotes a process of individual or collective cognitive change from criminal, radical or extremist identities to a non-criminal or moderate psychological state. According to Rabasa, Pettyjohn, Ghez, and Boucek (2010), de-radicalisation also refers to the developing of perceptions that using violence to promote social change is unacceptable. The changes de-radicalisation aims for are within the individual's system of values and include the rejection of extremist ideology and acceptance of values that are typical of the majority (Ashour, 2009; Rabasa et al., 2010). De-radicalisation has to be differentiated from disengagement, which describes the mere behavioural role change (from offending to non-offending) while leaving the ideological or psychological aspect to one side (Koehler, 2015). While de-radicalisation is the process of changing individuals' beliefs, disengagement is the process of changing an individual's behaviour in order to withstand the violence and withdraw from a radical group (Rabasa et al., 2010). On this basis, we may generalise that disengagement is the first step in the process of de-radicalisation. First off, it is necessary to change the behaviour of a radicalised individual, and then the long process of changing individuals' beliefs and values takes place. Both de-radicalisation and disengagement usually involve interventions (e.g. by states, local communities) with the goal of promoting democratic values and encouraging the re-integration of radicalised individuals.

Countering radicalisation and violent extremism requires both effective criminal-justice action against those who incite others to violence and seek to recruit others, and comprehensive, multi-disciplinary efforts to address conditions that are conducive to radicalisation, violent extremism and terrorism (OSCE, 2014). Countering extremism was traditionally an exclusive task for security sector agencies, however in the light of contemporary international initiatives more preventive and soft-oriented approaches to prevention are being developed. For effective prevention, the problems of radicalisation and extremism must be understood as involving several intertwining core elements that together create virtually infinite possible ways for an individual's radicalisation (Prislan et al., 2018). Prevention programmes need to address various contributing factors, including different actors, and consider the social and cultural characteristic of local environments. In a local setting, shared responsibility, multi-agency cooperation and community-policing strategies play a pivotal role (Fleming & Wood, 2006). The police service is in fact a crucial actor in facilitating a preventive approach

at the local or regional level. The police is also the leading agent for promoting a preventive multi-agency approach and maintaining cooperation among the different stakeholders. This is particularly the case in local environments where police officers have established a vast and strong network of contacts. Besides the police, individuals and institutions from the local environment are the main source of information regarding the development of radicalisation and are therefore important for the efficient prevention of radicalisation. In general, the preventive work typically includes the following areas and sectors: children and adolescents, employment and social inclusion, equal opportunities and integration, cultural diversity, voluntary efforts, participation and affiliation, healthcare and foreign policy. Although not all violent extremists are young, preventive programmes and policies can produce significant effects by tailoring their aims and objectives particularly to young people. Namely, it is very important to include formal educational institutions, communities and families in efforts to counter extreme violence and radicalisation (Veenkamp & Zeiger, 2015). When planning individually and locally tailored prevention strategies, in addition to the abovementioned factors influencing radicalisation, particularly factors that discourage and demotivate people from radicalisation and adherence to extremist groups need to be taken into account. In summary, each case of terrorist radicalisation results from the unique intersection of an enabling environment and the personal trajectory and psychology of a given individual (OSCE, 2014). One agreed finding in most of the empirical studies into radicalisation is that where a multi-situational position exists, it results in a more politically, socially, and economically deprived landscape making it more fertile to allow a process of radicalisation into extremism (Vertigans, 2011). The counter-radicalisation strategies need to consider such diversity and inconclusive impact of drivers and motivational factors. Regardless of the fact that prevention of radicalisation in not a new concept, in recent years practitioners and international communities are dealing with the question how these strategies can be more tailored to local settings and specific characteristics of operating in local environment, where the aforementioned diversity is much more apparent. For this reason analysing local approaches and sharing experience is important for developing good practices. Accordingly, in the sections below we analysed some basic police strategies and approaches in the area of preventing radicalisation used in Croatia, which was then also a subject of our research.

# 3 THE ROLE OF POLICE IN PREVENTING RADICALISATION AND EXTREMISM IN CROATIA

There is growing recognition that the community policing model can significantly help with the prevention of radicalisation, violent extremism and terrorism (Pickering, McCulloch, & Wright-Neville, 2008; Spalek, 2012). The typical meaning associated with community policing is policing that occurs with the active support of citizens and inspires police to engage in forms of policing that are inclusive rather than extractive (Acemonglu & Robinson, 2012). Community-oriented

policing encourages cooperation between the police and the public, between the police and other stakeholders in the community, and enhances the ability to create partnerships to achieve security and quality of life. The idea of this kind of policing is difficult to grasp because it means different things to different people and, therefore, it is appropriate to explain the Croatian model of community policing.

To achieve the successful transformation of the Croatian police, the reform included several aspects that targeted all organisational levels, from individual police officers through to the organisation as a whole. It was expected that the strategy of community policing in Croatia would positively influence how the police is public perceived, make it easier to recognise the local community policing officers, and develop close relationships between citizens and the police. For Croatia this is a strategy emphasising the altered roles of police officers, the view that the police is a public service and the changing role of citizens and the local community in the creation and maintenance of safety. The beginnings of community policing in Croatia date back to 2003 when experts from the Ministry of the Interior developed and launched a new strategy for police activities. At the organisational level, two new posts were introduced, namely "contact police officer" and "police officer for prevention". This event constituted the backbone of the uniformed police reform (Faber & Cajner Mraović, 2003). Contact police officers have a permanent patrolling area where they rely on proactive, cooperative relationships with citizens and "key persons in the community" (principals of educational institutions, business owners, responsible persons in various institutions and organisations in the area for which the contact police officer is responsible) in order to observe and resolve problems in that area. Their engagement suggests they can recognise and resolve problems not traditionally falling under police jurisdiction, but which certainly affect the security in a given area.

Further, the Croatian police were given the opportunity to initiate the establishing of coordinating bodies made up of representatives of both citizens and the police. According to the Croatian model, these co-operative bodies in the community are Prevention Councils, which are collaborative and synergistic work alliances with related and unified capabilities, expertise and resources of community-based collaborative security enhancement (Borovec, 2013). This concept is based on the Community Coalition Action Theory (Butterfoss & Kegler, 2002). In that context, police and other partners must have sufficient organisational capacity, experience, commitment, leadership and vision to form and build an effective coalition (Butterfoss & Kegler, 2009). Theory asserts that through collaborative efforts coalition partners can achieve and maintain long-term outcomes in community security better than what individual stakeholders can achieve and maintain alone (Butterfoss & Kegler, 2009). Together, they identify problems in the community and highlight priorities for their resolution (Cajner Mraović, 2009). This stresses not only the need to activate all the potential and resources of the police, but of society at large, by creating an adequate model for coordination and partnership between the police and other competent bodies, agencies and institutions, the media and individual citizens. The earliest bodies

of this kind were established in 2004, with a total of 167 being created since then. They are well experienced in the field of community prevention considering their 15 years of experience. In summary, there are many signs that community policing is present in the work of the Croatian police. These include not only the creation of new posts within the police, contact police officers, police officers for prevention and Prevention Councils in the community, but many examples of specific cooperation between the police and the public in resolving problems related to safety and the quality of life in general. This has all contributed to the development of interactive relations, more frequent contacts by citizens with the police in non-incident situations, and changing the ratio between reactive and proactive policing (Kovčo Vukadin, Borovec, & Ljubin Golub, 2013).

In the following section, we present research findings concerning Croatian police officers' perceptions of the state of radicalisation in Croatia and effectiveness of current practical approaches, with an emphasis on a multi-stakeholder and cross-sectoral approach to preventing radicalisation and violent extremism in Croatia. Another study aim was to evaluate whether, using a proposed training design, it is possible to strengthen the notion of institutional interdependence in police officers' efforts in the area of facilitating and supporting disengagement from radicalisation.

#### 4 DESCRIPTION OF THE METHOD, SAMPLE, AND INSTRUMENT

#### 4.1 Sample Description

To evaluate the effectiveness of the various institutions that are involved in preventing radicalisation leading to extremism, a study was conducted on a sample of 108 students from the Croatian Police College of the Ministry of the Interior (MoI). The data were collected during the students' courses in December 2018. Respondents who were regular students (all of them are police officers) without any work experience in the police accounted for 28.1 percent of the sample, with the rest working on the local level – police stations (66.7 percent) and regional level – police department (4.6 percent). Those respondents who were employed by the police possessed 1 to 11 years' work experience (on average 5.7 years; standard deviation 2.93).

#### 4.2 Research Instrument

We used a questionnaire developed in the *First Line*<sup>3</sup> project dedicated to the training of various stakeholders (e.g. representatives of the police, local governments, NGOs, education, and health) in the area of radicalisation and strengthening deradicalisation/disengagement processes in the Western Balkans (Prislan et al., 2018). For the purpose of the study, we adapted the questionnaire to suit the

<sup>3</sup> FIRST LINE Practitioners Dealing with Radicalisation Issues – Awareness Raising and Encouraging Capacity Building in the Western Balkan Region, project No. HOME/2014/ISFP/AG/RADX/7533 (2016-2018), funded by the Internal Security Fund (ISF), European Commission.

Croatian environment, including altering different parts of the questionnaire. The questionnaire was composed of several sets of questions. Respondents were asked to share information about the extent of their knowledge in the area of radicalisation and to assess the presence of various types of radicalisation in their local environments. Next set of items was on factors and conditions that affect the development of extremism and strengthening the radicalisation of an individual (Cronbach alpha 0.729; 13 items). Respondents also assessed the extent to which the various stakeholders are able to successfully prevent radicalisation through adequate and professional conduct (Cronbach alpha 0.898; 13 items).

Responses to all questions were provided on a five-point scale, where 1 corresponded to the lowest and 5 the highest possible degree (of occurrence or agreement).

#### 4.3 Survey Implementation

For the study's purposes, we developed a training session on the prevention of radicalisation and extreme violence in Croatia. Training and education are key components of the successful realisation of all community policing activities (Zhao, Thurman, & Lovrich, 1995) because the community policing philosophy implies fundamental changes in many areas of policing. Within the framework of the bilateral Slovenia-Croatia project "Community policing and the role of the police in preventing violent radicalisation in Slovenia and Croatia", in December 2018 a training session on understanding and preventing radicalisation in Croatia was prepared. Preparation of the training entailed two phases; first, development of the training programme, evaluating it on a representative sample of police students, and then developing the final version of the programme for community policing officers in Croatia (to be held in the second half of 2019). The training concerned with the prevention of radicalisation and extreme violence in Croatia has four main parts:

- a. Risk and protecting factors of radicalisation and violent extremism (including definitions of radicalisation, extremism and violent extremism);
- b. The process of radicalisation;
- c. EU innovative initiatives for safe urban public places; and
- d. Police activity in the local environment to prevent radicalisation the role of the community policing officer.

Accordingly, the training participants were briefed on the latest trends regarding terrorist attacks in Europe and the different approaches to preventing and disengaging from radicalisation. The study participants (students of the Police College, MoI of Croatia) were interviewed (a) at the start and (b) after the completion of the training to determine how such training had influenced their knowledge and attitudes concerning preventing radicalisation and violent extremism. The study's main aim was to evaluate the possibility of strengthening police officers' knowledge level and the notion of institutional interdependence in disengagement from radicalisation by using such a training design.

#### 5 RESULTS AND DISCUSSION

The results shown in Table 1 refer to the respondents' self-assessed knowledge concerning extremism, violent extremism and the radicalisation process and show that a below-average mean value was obtained at the first testing (mean = 2.51). This result reveals the relatively low level of the participants' knowledge about the researched phenomena. However, the post-test results conducted immediately after the students' study courses show a higher level of knowledge about extremism and radicalisation. The difference between the results of the test and the post-test is statistically significant (t-test = -8.876, p < 1%). It may thus be concluded that the contents provided during the students' education significantly increased the participants' knowledge of the phenomena that are the subject of this research.

		Mean	STD	SEM	t-test/p
How much do you think you know about extremism, violent extremism and the process	Before the training	2.51	.793	.077	-8.88/0.000
of radicalisation?	After the training	3.29	.801	.077	-0.00/0.000

Legend: A scale from 1 (nothing at all) to 5 (a lot)

We also asked the respondents "In Croatia, do we devote enough or too little attention to the occurrence of extremism and the development of radicalisation?", to which 55.6% of the students included in the training stated there is not enough training and attention to the issue, with just 10.2% assessing there is sufficient attention. Then, the study determined the respondents' general attitude to the possibility of preventing radicalisation. Prior to the training, most respondents (56.5%) had believed that radicalisation can be prevented, but a significant share of them (40.7%) also stated they did not know if anything can be done to prevent this negative phenomenon. The results obtained after completion of the training show a significant rise in the proportion of respondents who consider it is possible to prevent radicalisation (88%) and a parallel drop in the share of respondents who (9.3%) who still do not know if this is so. The share of respondents thinking it is not possible to prevent radicalisation is the same before and after the training (2.8%).

Table 2 shows the results of respondents' answers, how many different factors affect the development of extremism and the strengthening of the radicalisation of an individual.

Self-evaluation of knowledge level concerning extremism, violent extremism and radicalisation

Table 1:

Table 2:
Assessment
of factors and
conditions
that affect the
development of
extremism and
strengthening
the
radicalisation
of an
individual

On a scale from 1 to 5 indicate how much you think the following conditions or factors affect the development of extremism and strengthening the radicalisation of an individual. To answer use a scale, where 1 means that the factor in your opinion has no impact and 5 that a factor has a strong impact.	before/ after the training	Mean	SD	t-test (t/p)
Injustice in the world.	before	3,34	1,01	3,40 / ,001
figustice in the world.	after	3,02	1,10	3,407,001
Financial/economic crisis.	before	3,69	,85	3,77 /,000
T mancial/economic crisis.	after	3,36	1,02	3,77 7,000
Political disagreements in the world.	before	3,67	,98	not statistically
Tomical disagreements in the world.	after	3,59	,98	significant
Political disagreements in the local envi-	before	3,13	,91	not statistically
ronment.	after	3,31	1,10	significant
Religious or other ideological indoctrinati-	before	3,65	1,06	-3,49 / ,001
on of people.	after	4,06	,82	-3,49 / ,001
Promotion/fuelling of hatred by political	before	3,73	1,01	not statistically
leaders.	after	3,86	,93	significant
Droma gan da hay roligious los dars	before	3,64	1,03	2.49 / 001
Propaganda by religious leaders.	after	4,03	,89	-3,48 / ,001
I. di. d. 1/- 6-1i 6	before	2,96	1,02	not statistically
Individual's feeling of powerlessness.	after	3,11	1,09	significant
Individual's characteristics/personality	before	2,93	1,03	-4.04 / .000
Individual's characteristics/personality.	after	3,43	1,02	-4,04 / ,000
Departing of the modic (necessary TV)	before	3,69	,87	not statistically
Reporting of the media (newspapers, TV).	after	3,73	,96	significant
Online managen de (Internet ED Testus)	before	3,80	,88,	2.27 / 025
Online propaganda (Internet, FB, Twitter)	after	4,03	,90	-2,27 / ,025

The respondents are of the opinion that radicalisation is mostly contributed by religious or other ideological indoctrination of people, the promotion/fuelling of hatred by political leaders, online propaganda, and the propaganda by religious leaders. After the training, we observed stronger opinions of respondents that ideological and religious indoctrination, influence of online propaganda, the opinion of political leaders, and the propaganda of religious leaders contribute to radicalisation. On the other hand, after the training respondents attributed less influence to reasons such as inequity in the world and the economic crisis.

We asked the participants of the research what kind of extremist behaviour is, in their opinion, the most present in Croatia. The results are shown in Figure 1 below.

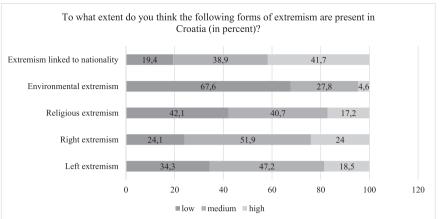


Figure 1: Perceived presence of different forms of extremism in Croatia

Respondents considered extremism liked to nationality as the most common form of extremism in Croatia, followed by right-wing extremism. Religious and leftist extremism were assessed as moderately frequent, while environmental extremism was labelled as very rare. When we more closely analysed the forms of religious extremism in Croatia, Islamic (37.0 percent) and Catholic (32.4 percent) extremism were the most frequently opinionated.

Table 3 presents the results of the respondents' assessment of the extent to which the various stakeholders are able to successfully prevent radicalisation through adequate and professional conduct. *Columns A* show the answers the participants gave prior to the training, while *columns B* presents answers to the same question after the training had been completed. The last column compares the mean values in column A and column B. A *t-test* was used to analyse statistically significant differences between the pre- and post-training responses.

Table 3: Perceived expected effectiveness of different stakeholders in preventing radicalisation

Which institutions listed below are	A: Be	efore tra	ining	B: A:	fter trair	ning	
able to effectively prevent radicalisation processes in Croatia through proper/ professional conduct in their field?	Mean	SD	4+5 %	Mean	SD	4+5 %	t-test (t/p)
Police officers in local environment	3.16	.99	38.9	3.80	1.15	64.9	-6.14/.000
Specialised police departments/ units	3.67	.92	60.2	4.01	.88	73.1	-3.79/.000
Intelligence services	3.89	1.06	65.7	4.26	.84	80.5	-3.85/.000
State authority – the government	3.94	.99	65.7	3.89	1.01	67.6	not statisti- cally signi- ficant
Authority in local communities – the municipality	3.17	1.08	38.3	3.79	.99	63.9	-5.92/.000
Management of foreigners (asylum seekers) accommodation centres	2.99	1.14	33.3	3.51	1.05	50.0	-5.03/.000
Social services – SWC	2.66	1.07	20.4	3.27	1.00	37.1	-5.64/.000
Healthcare services	2.33	1.01	12.0	3.02	1.07	30.6	-6.29/.000
Politicians, political parties	3.45	1.29	56.1	3.46	1.19	53.7	not statisti- cally signi- ficant
Non-governmental organisations	2.81	1.18	29.6	3.25	1.08	42.1	-4.71/.000
Schools	3.12	1.26	39.8	3.50	1.11	50.0	-2.90/.004
Media	3.83	1.05	70.4	3.83	1.04	67.6	not statisti- cally signi- ficant
Religious organisations	3.42	1.08	46.7	3.77	1.03	64.8	-3.15/.002

Legend: A scale from 1 to 5 where 1 means they can do nothing to prevent it, and 5 that they can do a great deal.

The degree of awareness of the interdependence of the various institutions in preventing radicalisation was statistically significantly higher after the training had been conducted. The average score (see column B) exceeds 3 on the 5-point scale, showing the tendency for a higher level of general awareness and the significance of the roles held by the majority of stakeholders for preventing radicalisation. In the respondents' opinion, before the training, state authority – the government, intelligence services, special police units, politicians and political parties – is able to prevent the radicalisation process most effectively, while healthcare professionals, social services - welfare centres, non-governmental organisations and the authorities at the Detention Centre for Foreigners can prevent radicalisation the least effectively. The results show the respondents still mainly see the prevention of radicalisation as a task of the security sector agencies and their hard security measures. Since the respondents stressed the role played by the core government institutions, one may assume the respondents continue to lack certain knowledge about the influential factors and drivers of radicalisation and violent extremism, where such drivers typically originate from the local environment, social interactions and situational circumstances. The training significantly impacted the respondents' attitudes with the *t-test* showing a statistically significant difference in 10 out of the 13 variables. Repeated interviewing shows higher mean values

for most of the variables examined. Statistically significant differences between the pre- and post-test results were not obtained for the variables of state authority – the government, politicians and political parties and the media. This means the outcome of the training was that more respondents believed that having a greater number of stakeholders can effectively help to prevent the radicalisation process. After the training, the respondents attributed greater importance to other stakeholders, along with state authority – the government, intelligence services, special police units, politicians and political parties. This underlines the importance of adopting a multi-agency approach to preventing radicalisation. The most significant changes in opinions were seen in relation to the role played by healthcare professionals, local police, local community authorities and social services. This shows that training strengthened the students' opinion regarding the significant role of the latter stakeholders in preventing radicalisation.

In order to better understand the respondents' attitude to the involvement of the various institutions in the preventive radicalisation programmes, we performed a factor analysis. With this analysis, we wanted to check whether the different institutions for helping individuals disengage from radicalisation can be grouped together (Table 4).

KMO: 0.86 Factors (total 66.45% of variance explained) Social welfare Government and Security agencies institutions politics (20.85% varian-(14.77% varian-(30.83% variance ce explained) explained) ce explained) Healthcare services .828 Schools .801 Social services - SWC .779 Non-governmental organisations .730 Media .620 Authority in local communities – a .566 municipality Religious organisations .546 Managements of accommodation cen-.466 Specialised police departments/units .836 Police officers in the local environment .728 Intelligence services .712 State authority - the government .821 .802 Politicians, political parties

Grouping of institutions through factor analysis

Table 4:

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalisation

We found that institutions for preventing and deterring radicalisation can be divided into three types. The largest group contains institutions from the wider area of social welfare, civil society, local authorities and the media, the second group consists of security agencies, and the third the government and political parties. Accordingly these groups have a different role in preventing radicalisation, either through direct contacts with communities and individuals, or by authoritative means, policy development and supporting preventative initiatives. Preventing violent radicalisation is not simply a state-agency issue. Since complex situations are involved whereby relevant information is potentially spread through different people and organisations, and some approaches may need to rely on multiple parties, it is important that agencies cooperate well. Namely, first-line professionals encounter many people in different situations every day. During these encounters, they may see 'signs' or 'indicators' that reveal a person is being radicalised or is radicalising someone else.

When evaluating whether the respondents think that the persons/institutions on the list of various stakeholders are (not) doing enough to effectively prevent extremism/radicalisation in Croatia (Table 5), the average score is below 3 on the 5-point scale, showing the respondents' relatively negative perception of the listed institutions' preventive work concerning extremism and radicalisation.

Although, on average, one-third of the respondents showed a neutral attitude to this question, the respondents generally believe that politicians/political parties, the government, schools, municipalities and non-governmental organisations are paying too little attention to it. In contrast, they perceive the efforts made by the intelligence services and specialised police units are sufficient.

Table 5: Perceived actual efficiency of different stakeholders in preventing radicalisation

Evaluate whether you think that the persons/institutions on the list below are doing enough or not enough to effectively prevent extremism/radicalisation in Croatia.	Mean	SD	1+2 %	3 % o	4+5 % +
Police officers in the local environment	2.85	1.08	38.3	38.3	23.4
Specialised police departments/units	3.02	1.04	27.1	43.9	29.0
Intelligence services	3.03	1.15	32.7	32.7	34.6
State authority – the government	2.27	1.03	61.3	27.4	11.3
Authority in local communities – the municipality	2.31	.99	56.1	32.7	11.2
Management of accommodation centres	2.46	.94	50.5	38.3	11.2
Social services – SWC	2.31	.93	55.7	37.7	6.6
Healthcare services	2.42	.95	52.3	35.5	12.2
Politicians, political parties	2.13	1.00	64.5	29.0	6.5
Non-governmental organisations	2.37	.96	55.1	34.6	10.3
Schools	2.38	.92	57.0	31.8	11.2
Media	2.56	1.04	47.7	35.5	16.8
Religious organisations	2.49	1.00	52.3	32.7	15.0

Legend: A scale from 1 to 5 where 1 means they are not doing enough, and 5 that they are doing enough.

Intelligence services (34.6 percent), specialized police departments (29 percent), and police officers in the local environment (23.4 percent) were assessed as institutions that do most to prevent extremism in Croatia. On the other hand, according to the respondents, state authorities, politicians and political parties and religious organizations do the least to prevent extremism in Croatia. Although the respondents are mostly police officers (approximately 66%) working at the local level and hold relevant experience, just 23.4% of them perceive their role in prevention from radicalisation is sufficiently effective. Evidently, most

respondents are unaware that the police is in fact a crucial actor in facilitating a preventive approach and a leading agent in promoting a multi-agency approach and maintaining the cooperation of the stakeholders. As described, community policing is a policing strategy especially conceived to identify the social causes of problems and, by developing relationships with the community that will support partnerships, to prevent them from becoming criminal activities. The community policing approach enables police officers to rely on social reports (e.g. national and local social services' reports, school reports, domestic violence reports from NGOs) to monitor individual citizens who are at risk of becoming radicalised. As a result, community policing needed to develop tools to prevent all forms of radicalisation, with special attention to radicalisation leading to violent extremism.

Table 6 shows paired samples *t-tests* on the stakeholders' effectiveness in preventing extremism/radicalisation in Croatia. The differences between expected and perceived actual effectiveness were tested and are clearly statistically significant with regard to all variables as *p* is below 0.05.

Mean of expected and SD t-test (t/p)perceived effectiveness 3.80 1.15 Pair 1 Police officers in the local environment 6.98/.000 1.08 2.85 4.01 .88 Pair 2 9.15/.000 Specialised police departments/units 3.02 1.04 4.26 .84 Pair 3 9.36/.000 Intelligence services 1.15 3.03 3.92 .99 Pair 4 State authority - the government 13.42/.000 2.27 1.03 3.79 .99 Authority in local communities - the muni-Pair 5 11.33/.000 cipality 2.31 .99 3.50 1.05 Pair 6 Management of accommodation centres 8.11/.000 2.46 .94 3.25 1.00 Pair 7 Social services – SWC 7.78/.000 2.31 .93 1.07 3.01 Pair 8 Healthcare services 4.93/.000 .95 2.42 3.47 1.19 Pair 9 10.17/.000 Politicians, political parties 1.00 2.13 3.25 1.08 Pair 10 7.33/.000 Non-governmental organisations 2.38 .96 3.50 1.11 Pair 11 Schools 8.08/.000 .92 2.38 3.83 1.04 Pair 12 9.89/.000 Media 2.56 1.04 3.77 1.03 Pair 13 Religious organisations 9.42/.000 2.49 1.00

Table 6: Paired samples t-tests on the stakeholders' effectiveness in preventing extremism/radicalisation in Croatia

Results show varying discrepancies in the respondents' expectations as to which institutions are able to prevent radicalisation and the actual efficiency of the work of institutions in preventing radicalisation. Institutions can be divided into

groups. The first group with the greatest discrepancy contains the government, authorities in local communities and politicians/political parties, pointing not only to the increased criticism of police officers in relation to the political elites at the state and local level, but also implying a certain mistrust in the ruling establishment. The second group shows a somewhat smaller discrepancy in the perception of the possible and genuinely efficient prevention of radicalisation and contains religious organisations, the media, specialized police units, and the intelligence services. This indirectly allows the conclusion that these institutions are almost in line with the legitimate expectations of political elites. The lowest discrepancies are observed for non-governmental organisations, social and healthcare services, and police officers in the local environment, however it is surprising that some of them have a relatively low perceived potential.

#### 6 CONCLUSION

The purpose of study was to analyse the multi-agency approach to prevention in a local setting and to present how young and future police officers in Croatia perceive the importance, responsibilities and actual efficiency of the different stakeholders in preventing extremism. Accountability simply to the law enforcement institutions and to the rules and regulations of a highly centralised organisation is not enough to ensure proper prevention. Accountability also to the community with respect to their needs is of the utmost importance. Preventive measures should be adapted to the threats and risk factors identified in the local environment as well as to the needs of the recipients since they must actually benefit the people they target. With respect to the growing awareness of the multidimensional nature of radicalisation and violent extremism, the strategies in place today increasingly emphasise intervention- and prevention-oriented strategies. With the proper coordination of local and national stakeholders working in the field and with the community's involvement, the police can more efficiently identify issues of relevance to preventing and countering radicalisation and violent extremism. The fact that trends and the contemporary global and regional security situation, radicalisation and violent extremism will continue to be a persistent security threat to liberal and democratic societies makes it essential to develop carefully planned prevention strategies customised to the specific features of local and national settings.

Some risk factors of radicalisation are similar to crime and preventing it should comprise part of a local and integrated security strategy because the traditional intelligence-gathering methods alone are less effective. This indicates the need to raise awareness among law enforcement professionals of their role in the early detection of vulnerable individuals at risk of radicalisation. The overall findings of our study on preventing and deterring radicalisation in Croatia show that the tackling and prevention of violent extremism and terrorism is largely seen as being top-down-oriented by the respondents, driven by the nation state and the main task of security sector agencies, namely the government, intelligence services and specialised police units. It is also important to mention that the police officers did not recognise and underestimated their own role and accountability

at the local level for preventing radicalisation. While the participants in the study still mainly emphasize the role of security agencies, we established that with appropriate training we can strengthen the awareness of the interdependence of the various stakeholders engaged in these efforts.

In a preventive multi-stakeholder approach, the police plays a crucial role in facilitating the cooperation on a local or regional level, particularly in at-risk local settings (Prislan et al., 2018). A prevention policy should mobilise local partnerships for crime prevention and social cohesion to strengthen individual and community resilience to the risk of radicalisation. A more precise set of recommendations and guidelines for planning and modelling counter-radicalisation strategies is offered by the Prevent-Refer-Address concept [P-R-A] that uses a risk-based approach to preventing radicalisation that leads to violent extremism and terrorism. This concept suggests that the duties of partners be defined at the local and national levels and should be engaged as first-liners or their supporters in the risk-based prevent, refer and address approach. Both levels should incorporate relevant governmental and non-governmental civil society partners and experts as needed in specific cases. In discharging their duties, all of these authorities should initially demonstrate awareness and understanding of the risk of radicalisation in their area, institution or body (Kozmelj, 2018). Recommended partners of the P-R-A mechanism on the national level are the ministry of education, ministry of local government administration, ministry of internal affairs/police, ministry of culture, youth and sports, ministry of health, ministry of labour, family and social welfare, prison and probation authorities, academia, association of municipalities, selected representatives of local communities, associations of NGOs and other civil society partners, religious communities representatives, and the governmental office responsible for strategic communication.

Recommended partners of the P-R-A mechanism at the local level are a local government representative, a representative of education at the local level (teachers), centres for social affairs (social workers), psychologists, representatives of culture, youth and sports at the local level, representatives of the health sector (general practitioners), representatives of the police (community policing representatives), representatives of prison and probation authorities, academia, religious communities, NGOs, other CSO and municipality actors invited in individual cases when relevant i.e. trainers from sport clubs, parents, organisations of teachers, etc. According to the P-R-A mechanism on the national level, it is important to provide political, financial and strategic support for the work of the P-R-A mechanism at the local level (municipalities) and to support development of the P-R-A mechanism in line with national strategy objectives. Responsibilities on the national level also include coordination and communication, development of standard procedures and guidelines for the local level by sectors, drafting and amending legislative proposals/initiatives, supporting research at local levels to identify root causes, triggers and vulnerable groups, analysing feedback from the local level, monitoring, evaluating and providing the local level with important information. Other recommended tasks at the local level include screening information received directly by the P-R-A panel, assessing the nature and extent of the risks, developing an action plan in individual cases, assigning tasks to the most competent local partners, and evaluating progress (the level of disengagement, de-radicalisation and re-integration of radicalised individuals etc.) (Kozmelj, 2018).

Prislan et al. (2018) in their analysis of radicalisation in the Western Balkans emphasise that the basis of the EU's prevention work in the area of radicalisation and violent extremism is the EU Strategy for Combating Radicalisation and Recruitment to Terrorism adopted in 2005 and revised in 2008 and in 2014 (Council of the European Union, 2014). The strategy calls for the development of: (1) awareness-raising programmes and sector-specific training modules for first-line practitioners; (2) the involvement of and drawing on resources and expertise within civil society and the private sector to build resilience; (3) the exchange of best practices and experience with a view to developing exit programmes; (4) acquiring know-how and re-integrating former terrorists; (5) steering research to understand the phenomenon of radicalisation in an ever-evolving context; (6) ensuring coordination between academics and various first-line practitioners; and (7) informing future policy decisions, including in the area of exit strategies and programmes (Council of the European Union, 2014). According to the first point of this strategy, it should be stressed that this kind of training is also necessary in Croatia, and study results show that such training does have positive effects on strengthening police officers' competencies with respect to preventing and deterring radicalisation and violent extremism.

#### REFERENCES

- Acemonglu, D., & Robinson, J. A. (2012). Why nations fail: The origins of power, prosperity and poverty. London: Profile Books.
- Ashour, O. (2009). *The deradicalization of Jihadists: Transforming armed Islamist move- ments.* New York; London: Routledge.
- Bertram, L. (2015). How could a terrorist be de-radicalised? *Journal for Deredicalization*, (5), 120–149.
- Borovec, K. (2013). Razvoj vijeća za prevenciju kriminaliteta u lokalnoj zajednici prema održivim i učinkovitim koalicijama [Development of crime prevention council in the local community towards the sustainable and efficient coalition]. *Policija i sigurnost*, 22(1), 1–25.
- Butterfoss, F. D., & Kegler, M. C. (2002). Toward a comprehensive understanding of community coalitions: Moving from practice to theory. In R. DiClemente, R. Crosby, & M. Kegler (Eds.), *Emerging theories in health promotion practice and research* (pp. 157–193). San Francisco: Jossey-Bass.
- Butterfoss, F. D., & Kegler, M. C. (2009). Toward a comprehensive understanding of community coalitions: Moving from practice to theory. In R. J. DiClemente, R. A. Crosby, & M. C. Kegler (Eds.), *Emerging theories in health promotion practice and research* (2nd ed.) (pp. 157–193). San Francisco: Jossey-Bass.
- Cajner Mraović, I. (2009). *Prevencija kriminaliteta u lokalnoj zajednici: nova razina razvoja policije u zajednici* [Crime prevention in local communities: A new level of community policing]. Zagreb: Ministarstvo unutarnjih poslova, Policijska akademija.

- Cajner Mraović, I., Butorac, K., Lobnikar, B., & Žebec, M. S. (2018). Police contact in relation to crime perception and fear of victimisation. In G. Meško, B. Lobnikar, K. Prislan, & R. Hacin (Ed.), *Criminal justice and security in Central and Eastern Europe: From common sense to evidence-based policy-making: Conference proceedings* (pp. 119–133). Maribor: University of Maribor Press.
- Carpenter, J. S., Levitt, M., & Jacobson, M. (2009). Confronting the ideology of radical extremism. *Journal of National Security Law & Policy*, 3(Fall), 301–327.
- Clutterbuck, L. (2015). *Deradicalization programs and counterterrorism: A perspective on the challenges and benefits*. Washington: Middle East Institute. Retrieved from https://www.mei.edu/sites/default/files/Clutterbuck.pdf
- Council of the European Union. (2014). *Revised EU strategy for combating radicalisation and recruitment to terrorism* 9956/14. Brussels: Council of the European Union.
- De Leede, S., Haupfleisch, R., Korolkova, K., & Natter, M. (2017). *Radicalisation and violent extremism focus on women: How women become radicalised, and how to empower them to prevent radicalisation*. Brussels: European Parliament, Policy Department for Citizen's Rights and Constitutional Affairs.
- Della Porta, D., & LaFree, G. (2012). Processes of radicalization and de-radicalization. *International Journal of Conflict and Violence*, 6(1), 4–10.
- Demant, F., & de Graaf, B. (2010). How to counter radical narratives: Dutch deradicalization policy in the case of Moluccan and Islamic radicals. *Studies in Conflict & Terrorism*, 33(5), 408–428.
- European Commission. (2018). *Glossary Radicalisation*. Retrieved from https://ec.europa.eu/home-affairs/content/radicalisation-0 en
- European Commission's Expert Group on Violent Radicalisation. (2008). *Radicalisation processes leading to acts of terrorism*. Retrieved from http://www.rikcoolsaet.be/files/art\_ip\_wz/Expert%20Group%20Report%20Violent%20Radicalisation%20FINAL.pdf
- European Council & Council of the European Union. (2018). *EU-Western Balkans summit in Sofia*. Retrieved from https://www.consilium.europa.eu/en/meetings/international-summit/2018/05/17/
- Europol. (2018). *European Union terrorism situation and trend report*. Retrieved from https://www.europol.europa.eu/sites/default/files/documents/tesat\_2018\_1. pdf
- Faber, V., & Cajner Mraović, I. (2003). Strategija djelovanja Policija u zajednici: Reforma operativno-preventivnog rada policije u odori [Community policing strategy: Reform of operational-preventative work of uniformed police]. Zagreb: Ministarstvo unutarnjih poslova, Policijska akademija.
- Fleming, J., & Wood. J. (2006). New ways of doing business: Networks of policing and security. In J. Fleming, & J. Wood (Ed.), Fighting crime together: The challenges of policing and security networks (pp 1–14). South Wales: University of South Wales Press.
- Hutson, R., Long, T., & Page, M. (2009). Pathways to violent radicalisation in the Middle East: A model for future studies of transnational Jihad. *The RUSI Journal*, 154(2), 18–26.

- Institute for Economics & Peace. (2017). *Global terrorism index* 2017. Retrieved from http://visionofhumanity.org/app/uploads/2017/11/Global-Terrorism-Index-2017.pdf
- Koehler, D. (2015). De-radicalization and disengagement programs as counter-terrorism and prevention tools: Insights from field experiences regarding German right-wing extremism and Jihadism. In M. Lobardi, E. Ragab, & V. Chin, (Ed.), Countering radicalisation and violent extremism among youth to prevent terrorism (pp. 120–150), Amsterdam: IOS Press.
- Kovčo Vukadin, I., Borovec, K., & Ljubin Golub, T. (2013). Policing in Croatia: The main challenges on the path to democratic policing. In G. Meško, C. B. Fields, B. Lobnikar, & A. Sotlar (Eds.), *Handbook on policing in Central and Eastern Europe* (pp. 31–57). New York: Springer.
- Kozmelj, R. (2018). Prevent-Refer-Address concept as multi-stakeholder response to radicalisation in the Western Balkans. In G. Meško, B. Lobnikar, K. Prislan, & R. Hacin, (Eds.), *Criminal Justice and Security in Central and Eastern Europe: From common sense to evidence-based policy-making: Conference Proceedings* (pp. 87–102). Maribor: Maribor University Press.
- Lombardi, M. (2015). Violent radicalization concerns in the Euro-Mediterranean region. In M. Lobardi, E. Ragab, & V. Chin, (Eds.), Countering radicalisation and violent extremism among youth to prevent terrorism (pp. 83–100). Amsterdam: IOS Press.
- Lowe, D. (2014). Radicalization of terrorist causes: The 32CSM/IRA threat to U.K. security. In D. Lowe, A. Turk, & D. K. Das, (Eds.), *Examining political violence: Studies of terrorism, counterterrorism and internal war* (pp. 25–56). Boca Raton: CRC Press, Taylor & Francis.
- Lowe, D. (2017). Prevent strategies: The problems associated in defining extremism: The case of the United Kingdom. *Studies in Conflict & Terrorism*, 40(11), 917–933.
- McCauley, C., & Moskalenko, S. (2008). Mechanisms of political radicalization: Pathways toward terrorism. *Terrorism and Political Violence*, 20(3), 415–433.
- Moghaddam, F. M. (2005). The staircase to terrorism: A psychological exploration. *American Psychologist*, 60(2), 161–169.
- Nasser-Eddine, M., Garnham, B., Agostino, K., & Caluya, G. (2011). *Countering violent extremism (CVE) literature review*. Edinburgh: Counter Terrorism and Security Technology Centre, DSTO Defence Science and Technology Organisation.
- Neuman, P. (2010). *Prisons and terrorism radicalisation and de-radicalisation in 15 countries*. London: Centre for the Study of Radicalisation and Political Violence (ICSR).
- Organization for Security and Co-operation in Europe [OSCE]. (2014). *Preventing terrorism and countering violent extremism and radicalization that lead to terrorism: A community-policing approach*. Vienna: OSCE, Office for Democratic Institutions and Human Rights.
- Pickering, S., McCulloch, J., & Wright-Neville, D. (2008). Counter-terrorism policing: Community, cohesion and security. New York: Springer.

- Prislan, K., Černigoj, A., & Lobnikar, B. (2018). Preventing radicalisation in the Western Balkans: The role of the police using a multi-stakeholder approach. *Revija za kriminalistiko in kriminologijo*, 69(4), 257–268.
- Rabasa, A., Pettyjohn, S., Ghez, J., & Boucek, C. (2010). *Deradicalizing Islamist extremists*. Santa Monica: RAND. Retrieved from https://www.rand.org/content/dam/rand/pubs/monographs/2010/RAND\_MG1053.pdf
- Sageman, M. (2008). Leaderless Jihad: Terror networks in the twenty-first century. *Policing: A Journal of Policy and Practice*, 2(4), 508–509.
- Schmid, A. P. (2011). Glossary and abbreviations of terms and concepts relating to terrorism and counter-terrorism. In A. P. Schmid (Ed.), *The Routledge handbook of terrorism research* (pp. 598–706). London; New York: Routledge.
- Schmid, A. P. (2013). Radicalisation, de-radicalisation, counter-radicalisation: A conceptual discussion and literature review. The Hague: International Centre for Counter-Terrorism. Retrieved from https://www.icct.nl/download/file/ICCT-Schmid-Radicalisation-De-Radicalisation-Counter-Radicalisation-March-2013.pdf
- Spalek, B. (2012). Communities and counter-terrorism: Some final reflections. In B. Spalek, (Ed.), *Counter-terrorism: Community based approach to preventing terror crime* (pp. 181–207). New York: Palgrave Macmillan.
- Veenkamp, I., & Zeiger, S. (2015). Countering violent extremism: Program and policy approaches relating to youth through education, families and communities. In M. Lobardi, E. Ragab, & V. Chin (Eds.), Countering radicalisation and violent extremism among youth to prevent terrorism (pp. 151–163). Amsterdam: IOS Press.
- Vertigans, S. (2011). *The sociology of terrorism: People, places and processes.* Oxon; New York: Routledge.
- Wiktorowicz, Q. (2005). *Radical Islam rising: Muslim extremism in the West*. Lanham: Rowman & Littlefield Publications.
- Zhao, J., Thurman, Q. C., & Lovrich, N. P. (1995). Community-oriented policing across the U.S.: Facilitators and impediments to implementation. *American Journal of Police*, 14(1), 11–28.

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# The Police Perception of the Role of School in Preventing Radicalization: The Case of Croatia<sup>1</sup>

#### Jelena Pavičić Vukičević, Marko Prpić, Matea Korda

#### Purpose:

The aim of this paper was to explore whether and how educational institutions can be involved in the process of the prevention of extremism and radicalization from the point of view of the police.

#### Design/Methods/Approach:

Efficient prevention strategies include a community-oriented and multi-agency approach, and this research focuses on the role of education in preventing violent extremism and radicalization. This research was conducted on a sample of 108 students from the Croatian Police Academy of the Ministry of the Interior by a questionnaire examining the participants' knowledge on radicalization, the presence of various types of radicalization in their environment, factors and conditions that affect the development of extremism and radicalization and the ability of schools to prevent radicalization.

#### Findings:

Correlation analysis points to the role of schools in the prevention of radicalization by exerting influence on the three factors (financial/economic crisis, individual's characteristics/personality and online propaganda) which affect the occurrence of extremism and radicalization.

#### Research Limitations/Implications:

Future research should include a larger sample with an equal number of participants with and without work experience in the police, so that potential differences in their attitudes could be investigated. Additionally, it would be useful to investigate the attitudes of participants on how schools could prevent radicalization.

#### **Practical Implications:**

The results of this research could be used to present the importance of schools in preventing radicalization to various stakeholders in order to start implementing teacher training for the facilitation of this process.

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#### Originality/Value:

This paper gives us an insight into Croatian police officers' perception of schools as their partners in the prevention of radicalization and extremism.

UDC: 351.741:343.3

Keywords: extremism, police, prevention, radicalization, schools

### Zaznavanje policistov vloge šol pri preprečevanju radikalizacije – primer Hrvaške

#### Namen prispevka:

Namen prispevka je analizirati načine vključevanja izobraževalnih institucij v procese preprečevanja radikalizacije in ekstremizma ter proučiti mnenje policistov o tem vprašanju.

#### Metode:

Učinkovito preprečevanje radikalizacije vključuje večinstitucionalni pristop, podprt s filozofijo policijskega dela v skupnosti. Raziskava o vlogi izobraževalnih institucij pri preprečevanju radikalizacije je bila izvedena na vzorcu 108 študentov Visoke policijske šole Ministrstva za notranje zadeve Republike Hrvaške. Uporabljen je bil vprašalnik, s pomočjo katerega so raziskovalci proučevali stopnjo znanja udeležencev raziskave o radikalizaciji, oblike radikalizacije na Hrvaškem ter dejavnike, ki vplivajo na razvoj radikalizacije in ekstremizma. Znotraj tega so proučevali vlogo šol pri preprečevanju radikalizacije.

#### **Ugotovitve:**

Korelacijska analiza je pokazala povezavo med vlogo šole in preprečevanjem radikalizacije pri treh dejavnikih (finančna/ekonomska kriza, individualne značilnosti posameznika, *online* propaganda), ki vplivajo na pojav in razvoj radikalizacije in ekstremizma.

#### Omejitve/uporabnost raziskave:

Nadaljnje raziskave bi morale vključevati večji vzorec anketirancev z bolj uravnoteženimi delovnimi izkušnjami v policiji.

#### Praktična uporabnost:

Rezultati študije bi lahko služili kot osnova za krepitev zavedanja pomena in vloge šol pri preprečevanju radikalizacije ter ekstremizma in bi lahko bili osnova za usposabljanje učiteljev na tem področju.

#### Izvirnost/pomembnost prispevka:

Članek daje dober uvid v zaznavanje hrvaških policistov vloge šol kot njihovih partnerjev znotraj koncepta policijskega dela v skupnosti pri preprečevanju radikalizacije in ekstremizma med učenci.

UDK: 351.741:343.3

Ključne besede: ekstremizem, policija, preprečevanje, radikalizacija, šole

#### 1 INTRODUCTION

Over the past two decades, the world has witnessed many tragedies caused by terrorist attacks on all continents. They were committed by violent extremist groups as well as by radicalized individuals. Until recently, policy makers and researchers were focused on combating terrorism (Macaluso, 2016), but as we understand the origins of terrorism, we have become aware of the need to cope with radicalization and violent extremism to prevent terrorism. These concepts are largely debated and there is still no single definition of violent extremism and radicalization (Preventing violent extremism through education, 2017). However, there are some universally accepted key issues and theories behind these concepts (Dandurand, 2015) that enable us to use them in everyday life as well as in research or policy-making.

Radicalization refers to "a process through which individuals are persuaded that violent activity is justified and eventually become determined to engage in violence" (Dandurand, 2015, p. 24).

Violent extremism is widely understood as "the use of violence to further particular beliefs, including those of a political, social, religious or ideological nature" (Dandurand, 2015, p. 25).

Terrorism could be defined as "anxiety-inspiring method of repeated violent action, employed by (semi-) clandestine individual, group or state actors, for idiosyncratic, criminal, or political reasons, whereby – in contrast to assassination – the direct targets of violence are not the main targets" (Schmid, 2011a).

Summarizing the data on many terrorist attacks, Gereluk and Titus (2018) warn that there is no unique terrorist profile. A significant body of research from different parts of the world and with focus on different terrorist actions (Freilich, Adamczyk, Chermak, Boyd, & Parkin, 2014; Kozaliev, 2015; Lombardi, 2015; Murray, 2014; Schmid, 2011b) suggests that perpetrators of terroristic acts develop through a long process of radicalization in a variety of settings, including not only isolated neighbourhoods or immigrants' ghettos, but also schools and entire communities. The practical implication of these findings is a shift away from countering terrorism towards preventing radicalization and violent extremism (Henry, 2014; Macaluso, 2016).

The existing evidence reveals that a community-oriented and a multi-agency approach are crucial components of an efficient prevention strategy (Aiello, Puigivert, & Schubert, 2018; Kozmelj, 2018; Macaluso, 2016; Prislan, Černigoj, & Lobnikar, 2018). According to Organization for Security and Co-operation in Europe (Preventing terrorism and countering violent extremism and radicalization that lead to terrorism, 2014), the police is a crucial stakeholder in a community because it has the power and capacity to initiate and coordinate community efforts in preventing radicalization and violent extremism.

Although it is well known that the education policy and system are crucial in the socialization of future generations, the role of education in preventing violent extremism and de-radicalizing young people has only recently gained global acceptance (Kozmelj, 2018; Macaluso, 2016). In order to understand the significance of school's role as an educational institution in the process of preventing the occurrence of extremism and radicalization in a society, one can

use Bronfenbrenner's *Ecological Model of Human Development* (Bronfenbrenner, 1994), which vividly describes the layers of the environment's effect on the socialization of a person to desirable values. In the centre of the model, there is a microsystem comprised of the family, peers, school and religious settings or influences with which a student communicates on a daily basis, and after that follows the mesosystem, ecosystem and macrosystem. Socialization is, according to that model, actually the enculturation of a person, a person's immersion into the culture, a process through which a person becomes a member of a community (Härkönen, 2007). The significant predictor in the person's socialization to humanistic and democratic values is exactly the person's environment, which in itself possesses humanistic and democratic values, i.e. when all educational lines of force are pointed in the same direction.

This potential of education in preventing radicalization and violent extremism has been recently recognized by the world's leading international organizations. The European Commission has established the Radicalisation Awareness Network to support coordination, cooperation and collaboration of different stakeholders across Europe engaging with prevention of radicalization and violent extremism, including education institutions (Aiello et al., 2018; Inter-agency Network for Education in Emergencies [INEE], 2017). The United Nations General Assembly adopted the Plan of Action to Prevent Violent Extremism in 2015, which emphasized different aspects of engaging educational institutions in the prevention of radicalization and violent extremism (United Nations, General Assembly, 2015). As a response to this document, a year later UNESCO developed the first guidelines on prevention of violent extremism for teachers (Preventing violent extremism through education, 2017; Teacher's guide on the prevention of violent extremism, 2016).

Two types of interventions are used by the education sector to counter violent extremism: (1) providing access and quality education for all, and (2) specific programmes focusing on populations that have a higher probability of being attracted to violence. Young people are often mentioned as the group that is most vulnerable to radicalization and therefore international counter-terrorism strategies have engaged with youth with some of the education programs financed by the World Bank (de Silva, 2017).

Despite the growing demand for multi-agency cooperation and collaboration in preventing radicalization and violent extremism, the studies of possibilities and conditions for such cooperation and collaboration are still rare. It is extremely important that the police, as a crucial stakeholder in a multi-agency partnership for preventing radicalization, is aware of capacities and limits of other stakeholders and to have a positive attitude to such a community approach (Preventing terrorism and countering violent extremism and radicalization that lead to terrorism, 2014; Sozer, Sevinc, & Ozeren, 2015). This paper addresses the role of schools in the prevention of radicalization and violent extremism from the police officers' point of view. The purpose is to analyse ways in which young police officers in Croatia perceive schools as their partners in the prevention of radicalization.

#### 1.1 Reasons Why Schools Should Play an Important Role in Preventing Radicalization

Since young people are particularly vulnerable to the messages of violent extremists, they need opportunities to develop the knowledge, skills and attitudes that can help them build resilience to such propaganda, and teachers can help them with that goal (Preventing violent extremism through education, 2017; Teacher's guide on the prevention of violent extremism, 2016). Institutions of formal education play key roles in preventing radicalization at two levels. Firstly, schools foster shared values and critical thinking, and they help students develop basic life skills and social competences essential for living in democratic societies (Nordbruch, 2016). Education can help young people develop the communication and interpersonal skills they need to dialogue, face disagreement and learn peaceful approaches to change, develop their critical thinking to investigate legitimacy of extremist beliefs, develop the resilience to resist extremist narratives, engage constructively in society without having to resort to violence and to constructively engage in peaceful collective action (Preventing violent extremism through education, 2017; Teacher's guide on the prevention of violent extremism, 2016). Additionally, if parents and teachers aim to educate children towards democratic citizens who have respect for the rights of others and to tolerate beliefs that are different from their own, the education that young people receive cultivates beliefs and dispositions that oppose radicalism and extremism. Since extremists perform activities that they possibly had never thought they would be capable of, disengaging from their behaviour using various mechanism, democratic moral education may have an important role in adequately responding to signs of moral distancing (Pels & de Ruyter, 2012). At this level of generic prevention, students are given tools for boosting resilience against social polarisation and radicalization. Not only can schools cultivate different skills necessary for democratic life, but they are also places where early signs of radicalization can be noticed. Teachers are often the first ones to notice changes in appearance, thinking and behaviour of students, which provides them with an important role in initiating early responses (secondary prevention) (Nordbruch, 2016).

The first reason that leads to the prominent role of schools in preventing radicalization is the expansion of extremism to different social milieus and educational backgrounds, including classrooms and affecting life in schoolyards and on campuses. Concerns that are often addressed by extremist propaganda, like concerns about identity, immigration, gender, social and economic conflicts, discrimination and social marginalization, international conflicts, are all discussed in society and among students. Important channels for addressing these concerns are social networks, which are often used for hate speech, radicalization and calls for violence. Schools are responsible for providing alternative narratives to those promoted by extremist organizations and are expected to provide a safe environment for students to express their ideas and convictions, with the presence of teachers to moderate their discussions. However, it is important to be aware of the limits within which these views are acceptable (Nordbruch, 2016).

Not only schools, but also universities have strategic and unique function in preventing radicalisation. Roles of university are detecting, preventing, planning and producing of ideas to tackle radicalisation. Universities have to approach the problem of radicalisation interdisciplinary, while holistically viewing such problem (El-Muhammady, 2018). Thus, perceived problem of radicalisation can be ground for development of ideas and solutions to the problem at hand.

Universities should support the rest of the education system in the form of conducting research, implementing adequate intervention, i.e. the prevention programs with constant supervision, and upgrading and modifying prevention programs (Bašić, 2009). A better involvement of the university academia would create additional force in tackling radicalisation (El-Muhammady, 2018). Universities, through cooperation with state and public city and local authorities and the NGO's, and education, should develop deep cooperation with the police.

#### 1.2 Methods for the Prevention of Radicalization in Schools

As mentioned above, teachers already encourage the acceptance of various differences and respond to expressions of hatred and violence. However, many teachers express their concerns about the lack of knowledge and skills that allow qualified responses to different situations of radicalization. Teachers report problems with teaching on political subjects, such as Middle east, terrorist attacks or religion. Also, teachers have problem handling difficult discussions in which respect and consensus are difficult to reach, which is why they tend to avoid such topics in order to ensure order and peace in the classroom (Pels & de Ruyter, 2012). For that reason, training teachers is crucial for fostering competence to build resilience against radicalization and detect potential signs of extremism. The training should be incorporated in their existing professional training, rather than adding another training session on radicalization. For teachers to be able to pass on values of equality and tolerance to students, they themselves must go through training to raise awareness of cultural and religious diversity and accept differences (INEE, 2017; Nordbruch, 2016). The influence of democratic ideals and moral values of teachers and schools on students have not been investigated often. There is some evidence that teachers' interventions with xenophobic utterances of pupils are negatively related to xenophobia of students, which indicates that teacher intervening makes a difference (Pels & de Ruyter, 2012). It is important that teachers be aware of how they treat minority students, because teachers can more or less consciously exclude students when addressing them or their communities. Discrimination and different treatment of children from minority groups have negative influence on their well-being, motivation and achievements (Wubbels, Den Brok, Veldman, & Van Tartwijk, 2006). These are important findings because young people who are susceptible to radicalization tend to have a strong need for acknowledgement and relationships, and can be negatively impacted in case of teacher rejection (Pels & de Ruyter, 2012).

Another way to prevent radicalization at the school level is by learning democracy, which should not only be limited to the acquisition of knowledge. Students should be able to experience democracy, which means that schools

should provide students with the opportunities to actively participate in the education process. This step toward de-radicalization requires change at the institutional level. Active participation in the education process can strengthen students' identification with their social environment and prevent alienation, which often serves as a motive for connection with extremist groups, which fulfil the students' need for belonging (INEE, 2017; Nordbruch, 2016). Furthermore, inclusive approaches in multi-ethnic schools, like creating a sense of community through cooperative learning and developing democratic and justice-oriented communities, instead of accentuating assimilation and control, has a diminishing effect on the onset of radicalisation (Pels & de Ruyter, 2012).

As mentioned earlier, one of the important aspects of teacher training is to detect early signs of radicalization in students. In order for teachers to detect signs that students are getting involved in radical ideologies, the training should encourage teachers to engage in a dialogue with students to discover the motives behind their changed looks and behaviour. This method emphasizes the importance of the student-teacher relationship (INEE, 2017; Nordbruch, 2016).

In addition to training teachers, some changes should be made in the curricula. Migration, especially the representation of Islam and Muslims, is portrayed as a problem and a cause for concern, rather than as a normal feature of most European societies. This represents the imperfections of the curricula and textbooks, which do not accurately represent the diverse identities and biographies making up classes in European countries. Classrooms provide appropriate settings for tackling the problem of social polarisation and promoting inclusiveness. Considering the fact that students are exposed to various information from the media, teachers play an important role in explaining that information to students and directing them to consider the information critically. Many teachers are reluctant to teach their students about some controversial issues, such as wars in Syria and Iraq, which is not only important for building knowledge, but also for providing the space for students to express emotions, anger and frustration (Nordbruch, 2016). Violent extremism can be addressed by various topics, such as the issues of rights and responsibilities in society, justice, identity, belonging, freedom of expression, history of genocide and mass atrocities, secularism and humanism, gender equality and gender-based violence. Discussing these topics, if done in an appropriate way, can help young people to explore their own values and opinions and to manage their emotional responses, while gaining a better understanding of the underlying narratives of extreme ideologies. After these discussions, positive messages should be delivered about solidarity, respect for diversity, human rights, empathy, cultural sensitivity, understanding of discrimination, acceptance and communication. Moreover, young people should be encouraged to engage - to create and develop positive ideas and innovative solutions to today's challenges and global concerns. Schools can teach skills related to advocacy, campaigning, budgeting, organization building and leadership, in order to facilitate engagement (Preventing violent extremism through education, 2017; Teacher's guide on the prevention of violent extremism, 2016).

Keeping in mind the effect of media on promoting extremist ideologies, experts agree on the need for fostering media literacy and raising awareness of the online content and online strategies of extremist propaganda. An additional tool

for this aim is using alternative readings which provide new narratives to inspire critical thinking without imposing certain views and convictions (Preventing violent extremism through education, 2017; Teacher's guide on the prevention of violent extremism, 2016).

Taking into account the students' need for peer acceptance, an interesting approach to preventing radicalization is peer education. This refers to the approach in which peers lead discussions on various topics and provide authentic role models for their colleagues, which facilitates identification and encourages participation in these discussions (Nordbruch, 2016). Generally, schools are a good place for young people from different ethnic backgrounds to bridge the ethnic boundaries. However, research indicates that young people tend to withdraw into their own ethnic groups outside the school context. Interethnic contact leads to positive interactions only in specific contexts, for instance if groups are equal in their position on the status hierarchy (Pels & de Ruyter, 2012).

Additionally, education can possibly prevent radicalization through Global Citizenship Education (GCED), which promotes the sense of belonging to the global community and common humanity and focuses on instilling the respect for human rights, social justice, gender equality and environmental sustainability, which are fundamental values that help raise the defences of peace against violent extremism (Preventing violent extremism through education, 2017; Teacher's guide on the prevention of violent extremism, 2016).

Countries across the Europe have developed numerous projects including a range of police-led initiatives targeting schools, often aimed at creating an awareness of the risks of extremism among children and teachers, as well as at breaking down negative attitudes toward the police. An example of an initiative is "From one extreme to the other" in Great Britain, which is regarded as highly effective tool for teaching children about the dangers of extremism, intolerance and terrorism. A similar project is "Getting on Together", a DVD-based lesson program for schools, that helps teachers understand which children might be susceptible to extremism. The project is expanded with Welsh government support to a broader "Challenging Extremism" program for 11 years to adulthood that is being offered, among others, to schools. In Netherlands, some programs are designed to encourage critical thinking, the ability to listen to and objectively evaluate opposing views, the capacity to express thoughts in a non-confrontational way and to allow young people to safely vent frustrations (for example, by writing an essay about what made them angry and what their ideal society looks like). An important initiative in Denmark have been the discussions on Danish foreign policy in high school, universities, youth clubs and other venues frequented mostly by young people. More specifically, officials from the Danish Ministry of Foreign Affairs and other government officials meet with young people and explain Denmark's positions on various foreign policy issues. Additional activities include the distribution of inspirational material on democracy and civic education in Danish public schools, the establishment of "civic centers", and the creation of an internet forum for young people on democracy and radicalisation. In Norway, ensuring that more young people complete their secondary school education is a general preventative measure (Vidino & Brandon, 2012).

Republic of Croatia fights terrorism with the "National Strategy for prevention and countering terrorism", which recognises important roles and cooperation of academic community, non-governmental organisations, religious organisations, private sector and media. There are no specific prevention programs for minors. Nonetheless, indirect dealing with this population can be seen in emphasizing the importance of education aimed at preventing radicalisation. Considering the importance of Internet in the lives of minors, important measure is "reducing the availability and effect of the Internet content that promotes radicalisation, recruitment and training" (Ricijaš, Kovčo-Vukadin, & Dodig Hundrić, 2017).

#### 1.3 Co-operation of Schools and Police in Preventing Radicalization

While schools in Croatia rarely cooperate with the police, the Nordic countries are cited as an excellent example of cooperation. The Croatian police promote the safety of road traffic in schools and, at the invitation of the school, speak out about the dangers of various addictions. The Nordic countries have developed and implemented co-operation between schools and police at the local level. In the Nordic countries, schools and even kindergartens are regarded as equal stakeholders in the prevention of radicalization. Also, the Nordic countries are distinguished by the simultaneous and equal education of all social stakeholders, including police officers and school staff (Butt & Tuck, 2014; Ramboll, 2017). The situation is similar in the countries of Central Europe, while in the countries of Eastern Europe, that is, in the Balkans, the situation is quite different. We can also link the above mentioned to the functionality of the community policing model (Ponsares, 2013). Community police officers are a rare occurrence in communities in Eastern Europe which indicates poor implementation of community-policing model (Meško, Fields, Lobnikar, & Sotlar, 2013). Since the community police did not come to life, so did the police community's cooperation with the community. In some countries government and police recommend contacting the police in the case of radicalisation emerging in schools (Preventing violent extremism in schools, 2016).

#### 2 DESCRIPTION OF THE METHOD, SAMPLE, AND INSTRUMENT

#### 2.1 Sample Description

A sample of 108 students from the Croatian Police Academy of the Ministry of the Interior participated in this study during the students' courses in December 2018. The majority of the participants (66.7%) were working at the local level in police stations, 4.6 % at the regional level in the police department and 28.1% were regular students without any work experience in the police. The participants who were working in the police had, on average, 5.7 years of work experience (SD = 2.93), with the minimum length of service of 1 year and the maximum of 11 years. This research was conducted on police officers because of the idea that police officers and citizens collaborate and solve actual problems on the local level, and one important problem that can effect lives of the local community is

radicalisation. Moreover, since the police is a crucial stakeholder for preventing radicalization, it is important that the police is aware of capacities and limits of other stakeholders, such as schools.

#### 2.2 Instrument

This research was conducted by a questionnaire developed in the First Line<sup>2</sup> project, whose aim was to train various stakeholders (e.g. representatives of the police, local governments, NGOs, education, and health) to address the problems of radicalization and to strengthen de-radicalization/disengagement processes in the Western Balkans (Prislan et al., 2018). In order to adjust the questionnaire to the Croatian sample, different parts of the questionnaire were modified. The first set of items included participants' estimates of the extent of their knowledge on radicalization and the presence of various types of radicalization in their local environments. The second set of 13 items referred to the factors and conditions that affect the development of extremism and strengthening of the radicalization on an individual level. The Cronbach alpha reliability coefficient for this set of items is  $\alpha$  = .729. The last set of items consisted of 13 items that assessed the ability of various stakeholders to prevent radicalization through adequate and professional conduct. The Cronbach alpha reliability coefficient for this set of items is  $\alpha$  = .898. All the items were assessed on a five-point scale, ranging from 1 completely disagree to 5 – completely agree. For the purpose of conducting t-test presented in the Results section, it was necessary to recode variable assessing the ability of schools to prevent radicalisation from five-point scale to two categories (participants who believe schools have low and those who believe schools have high impact in preventing radicalisation). This was conducted by recoding 1 and 2 points from five-point scale to point 1, and 4 and 5 point to point 2. Point 3 on the original scale, which represents non-defining attitude, was excluded from t-test analysis.

The participants filled the paper-pencil questionnaire before and after the 4-hour training session about the latest trends concerning terrorist attacks in Europe and the different approaches to preventing and disengaging from radicalisation. In this research, only the results collected before the training were analysed.

#### 3 RESULTS

#### 3.1 Descriptive Analysis

In Table 1, there are means, medians, modes, standard deviations, minimum and maximum values for the statement on whether schools are able to, by taking appropriate/professional actions in their area, efficiently prevent the radicalization process in Croatia and for items related to which conditions i.e. factors affect the development of extremism and strengthening the radicalization of an individual.

<sup>2</sup> FIRST LINE Practitioners Dealing with Radicalisation Issues – Awareness Raising and Encouraging Capacity Building in the Western Balkan Region, project No. HOME/2014/ISFP/AG/RADX/7533 (2016-2018), funded by the Internal Security Fund (ISF), European Commission.

Table 1:
Descriptive
indicators for
the statements
about the
ability of
school to
efficiently
prevent the
process of
radicalization
and factors
affecting the
development of
extremism

	N	Minimum	Maximum	Mean (M)	Standard Deviation (SD)	Median	Mode
Extent to which schools are able to prevent radicalization processes	108	1	5	3.12	1.258	3.00	3
Factors affecting the development of extremism and radicalization							
Injustice in the world	107	1	5	3.34	1.009	3.00	3
Financial/economic crisis	108	1	5	3.69	0.848	4.00	4
Political disagreements in the world	108	1	5	3.67	0.976	4.00	4
Political disagreements in the local environment	108	1	5	3.13	0.908	3.00	3
Religious or other ideological indoctrination of people	108	1	5	3.67	1.059	4.00	4
Promotion/fuelling of hatred by political leaders	107	1	5	3.73	1.005	4.00	4
Propaganda by religious leaders	107	1	5	3.64	1.030	4.00	4
Individual's feeling of powerlessness	108	1	5	2.96	1.022	3.00	3
Individual's characteristics/personality	108	1	5	2.93	1.030	3.00	3
Reporting of the media (newspapers, TV)	108	1	5	3.69	0.870	4.00	4
Online propaganda (Internet, FB, Twitter)	106	2	5	3.80	0.877	4.00	4

		nothing	2	3	4	significant
Extent to which schools are able to	N	15	17	33	26	17
prevent radicalization processes	%	13.9	15.7	30.6	24.1	15.7
		does not affect	2	3	4	strongly affects
Factors affecting the development of extremism and radicalization						
Initiation in the ground	N	3	19	38	33	14
Injustice in the world	%	2.8	17.8	35.5	30.8	13.1
Financial/componic origin	N	2	3	39	46	18
Financial/economic crisis	%	1.9	2.8	36.1	42.6	16.7
Dolitical discoveryments in the record	N	3	10	27	48	20
Political disagreements in the world	%	2.8	9.3	25.0	44.4	18.5
Political disagreements in the local	N	3	22	48	28	7
environment	%	2.8	20.4	44.4	25.9	6.5
Religious or other ideological	N	4	10	30	38	26
indoctrination of people	%	3.7	9.3	27.8	35.2	24.1
Promotion/fuelling of hatred by	N	1	13	27	39	27
Promotion/fuelling of hatred by political leaders	%	0.9	12.1	25.2	36.4	25.2
D 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-	N	1	15	31	34	26
Propaganda by religious leaders	%	0.9	14.0	29.0	31.8	24.3
To diesi de alte de aliera e de accessione e e	N	5	33	41	19	10
individual's feeling of powerlessness	ridual's feeling of powerlessness $N$ 5 33 41 19 $N$ 4.6 30.6 38.0 17.6	9.3				
To disside all all and a tonic time / a consequent	N	8	28	45	18	9
Individual's characteristics/personality	%	7.4	25.9	41.7	16.7	8.3
Reporting of the media (newspapers,	N	1	7	35	46	19
TV)	%	0.9	6.5	32.4	42.6	17.6
Online propaganda (Internet, FB,	N	0	6	35	39	26
Twitter)	%	0.0	5.7	33.0	36.8	24.5

Table 2: Participants' percentage regarding the assessments of the statement about the ability of school to efficiently prevent the process of radicalization and factors affecting the development of extremism

Based on the results in Table 1, it can be seen that the Police Academy students on average more believe than they do not believe that school can, by appropriate i.e. professional actions in its area, efficiently prevent the processes of radicalization in Croatia (M = 3.312, SD = 1.258). To be more precise, 13.9% of the students believe that school can do nothing in the prevention of radicalization, while 15.7% of the students believe that school has an important role in that process. Median and mode values suggest that the majority of participants express neither strong nor weak belief in the importance of schools in the process of radicalisation.

The average assessments of the influence of the majority of factors affecting the development of extremism and strengthening the radicalization of an individual are above the average of the scale, which indicates that the students believe to a greater extent that said factors affect the development of extremism and strengthening of radicalization to a certain extent. Moreover, median and mode values suggest that the most common participants' answers are three or four on the scale from one to five. The factors for which the greatest part of the students believe that they strongly affect the development of extremism and strengthening of radicalization are fuelling of hatred by political leaders (25.2%), online propaganda (24.5%), propaganda by religious leaders (24.3%) and religious or other ideological indoctrination of people (24.1%). The largest part of the students (7.4%) believe that, among the tested factors, characteristics i.e. the personality of an individual has no influence whatsoever on the strengthening of extremism and radicalization.

The conclusion can be drawn that the students are more inclined to the attitude that school can prevent the processes of radicalization in Croatia and are of the opinion that the sources of extremism and radicalization mostly lie in the propaganda of such attitudes by influential public figures.

## 3.2 Correlation Between the Extent to Which Schools are Able to Prevent the Occurrence of Radicalization and Factors Affecting its Occurrence

A correlation analysis has been conducted in order to establish whether there are certain factors affecting the occurrence of extremism and radicalization for which the students believe that they can be prevented or affected in the area of school. It is important to investigate these correlations because the results could actuate cooperation between the police and schools in dealing with factors that potentially affect the occurrence of extremism. The results are shown in Table 3.

Table 3:
Correlations
between the
extent to which
schools are able
to prevent the
occurrence of
extremism and
radicalization
as well as
factors affecting
their occurrence

	1	2	8	4	ıc	9	^	<b>∞</b>	6	10	11	12
1. Extent to which schools are able to prevent radicalization processes	□											
2. Injustice in the world	.170	1										
3. Financial/economic crisis	.219*	.364**	1									
4. Political disagreements in the world	.063	.268**	.305**	1								
5. Political disagreements in the local enviro- nment	.142	.208*	.186	.629**	$\vdash$							
<ol> <li>Religious or other ideological indoctrination of people</li> </ol>	.101	.036	167	.253**	.240*	П						
7. Promotion/fuelling of hatred by political leaders	.112	020	920.	.395**	.163	.544**	Н					
8. Propaganda by religious leaders	.051	025	180	.123	.107	.682**	601**	1				
9. Individual's feeling of powerlessness	.171	.258**	.149	.175	.388**	.109	.023	.139	1			
10. Individual's characteristics/personality	.238*	.067	.188	034	.220*	680.	890.	.132	.530**	1		
11. Reporting of the media (newspapers, TV)	.145	.116	.012	.187	.134	.173	.150	.150	.061	.110	1	
12. Online propaganda (Internet, FB, Twitter)	.242*	023	.095	.230*	.197*	.204*	.312**	.133	.116	.159	.,009:	П
	747:	023	c%U.	USZ.	.197	507:	21 <i>C</i> .			.133	. 133	. 601. 011. 661.

The results in Table 3 indicate that the extent to which school can prevent the processes of radicalization has statistically significant positive correlations to three factors affecting the occurrence of radicalization. To be more precise, the students believing that school is able to do a great deal to prevent the process of radicalization are more inclined to believe that a financial/economic crisis (r = .219, p < .05), the characteristics/personality of an individual (r = .238, p < .05) and the online propaganda through Facebook and Twitter (r = .242, p < .05) really do affect the occurrence of the process of radicalization. All the factors affecting the occurrence of radicalisation that are significantly correlated have positive correlations, suggesting that participants who think that one factor strongly affects the occurrence of radicalisation, think the same for the other factors that are correlated with the first one. For example, the participants who believe that religious or other ideological indoctrination of people affect the occurrence of radicalisation, think the same for the propaganda by religious leaders (r = .682, p < .01). Described correlation is the strongest correlation found between the examined factors.

Regarding the established correlation, it is necessary to consider the role of school in the prevention of radicalization by exerting influence on the three factors (financial/economic crisis, individual's characteristics/personality and online propaganda) which affect the occurrence of extremism and radicalization.

## 3.3 Difference between Participants in Their Opinions about Factors Affecting Radicalisation Depending on Their Perceived Importance of Schools in Preventing Radicalisation

In order to investigate whether participants who believe schools have low or high impact in preventing radicalisation differ in their opinions about the importance of examined factors affecting radicalisation, t-test was conducted. Since perceived importance of schools was measured on a five point scale, the variable was recoded into two categories: those participants who believe school has low impact in preventing radicalisation and those participants who believe they have high impact. Recoding is described in more detail in the Method section. Prior to the analysis, it was concluded that assumptions for conducting t-test, regarding sample size, distribution normality and homogeneity of variables, were satisfied. The results are presented in Table 4.

				Equa	s Test for lity of ances	T-test for Equ		lity of
		N	Mean (M)	F	p	t	df	p
Tained as in the could	low	32	3.13	.866	.355	-1.438	72	.155
Injustice in the world	high	42	3.48					
Financial/economic	low	32	3.63	1.182	.281	-1.825	73	.072
crisis	high	43	3.95					
Political disagreements	low	32	3.78	.828	.366	.148	73	.883
in the world	high	43	3.74					
Political disagreements	low	32	3.00	.001	.975	734	73	.465
in the local environment	high	43	3.16					
Religious or other ide- ological indoctrination	low	32	3.59	.383	.538	616	73	.540
of people	high	43	3.74				df 72 73 73 73	
Promotion/fuelling	low	32	3.78	1.000	.321	796	72	.429
of hatred by political leaders	high	42	3.98					
Propaganda by religious	low	32	3.72	2.275	.136	076	72	.940
leaders	high	42	3.74					
Individual's feeling of	low	32	2.75	2.660	.107	-1.302	73	.197
powerlessness	high	43	3.07					
Individual's characteri-	low	32	2.63	.035	.851	-2.674	73	.009
stics/personality	high	43	3.28					
Reporting of the media	low	32	3.66	1.200	.277	-1.116	73	.268
(newspapers, TV)	high	43	3.88					
Online propaganda	low	32	3.66	.117	.733	-1.990	71	.050
(Internet, FB, Twitter)	high	41	4.07					

Table 4: Results of *t-test* for testing the difference between participants who believe schools have low and those who believe schools have high impact in preventing radicalisation in their opinions about factors affecting radicalisation

The results of t-test suggest that participants who believe that schools have low and those who believe that schools have high impact in preventing radicalisation do not differ significantly in their opinions about the effect of the most examined factors on the occurrence of radicalisation. The only factors that exerted difference between the two groups of participants are the ones regarding individual's characteristics (personality) (t = -2.674, df = 73, p = .009) and online propaganda (t = -1.990, df = 71, P = .050). The results suggest that participants who believe that schools have low impact in preventing radicalisation tend to believe in lesser extent that individual characteristics (M = 2.63) and online propaganda (M = 3.66) affect the occurrence of radicalisation than those who believe that schools have high impact on preventing radicalisation.

These results also support the idea that schools can have impact in preventing radicalisation and extremism by exerting influence on some factors affecting the occurrence of extremism and radicalisation, in this case factors regarding

individual's personality and online propaganda. Unlike correlation analysis, t-test didn't show the importance of schools in preventing radicalisation by exerting influence on financial/economic crisis.

#### 4 DISCUSSION AND CONCLUSION

The results of this research point out to the question of how an educational institution can, in practice, be involved in the process of prevention of the occurrence of extremism and radicalization in a society. Namely, the prevention of those negative occurrences, considering a person's and community's safety, is also founded on the inherent idea of the respect for general human rights and the prevention of the creation and spreading of stereotypes and prejudices towards a person as a bearer of various racial, ethnic, religious, sex, gender or age characteristics. This topic is therefore by its nature profoundly educational and especially significant for the development of a society as a whole.

The curriculum, as a complete planned, organized and purposeful experience of learning and teaching, comprises of the core, differentiated and school curricula as well as seven cross-curricular themes, the contents of which should be included into the educational work of all subject teachers and expert associates of the institution. So devised programmes exert their influence on the creation of school culture as the place of zero tolerance for all forms of violence. The school curriculum, as an implementing version of the national curriculum for a specific educational institution, presents the exact space for devising, implementing, realization and evaluation of different programmes in line with social prevention. These programmes can also be a part of the concept of civic education as a cross-curricular theme from the national curriculum (Ministarstvo znanosti i obrazovanja [MZO], 2017), by which a school directly influences the socialization of students to desirable humanistic and democratic or European values. European values are a part of the European concept promoting the establishment of permanent peace, economic growth and social development in the geopolitical territory of Member States of the European Union (Altaras Penda, 2005), and the concept contains the following values: human rights, respect for human life, peace, democracy, individual freedom, the rule of law, equality, solidarity, tolerance, self-fulfilment, respect for other cultures and religions (European Commission, 2014). Such contents also facilitate the acquisition of one of eight competences for life-long learning from the recommendations of the European Union (European Commission, 2014) and that is gaining social and civic competences, while some of the principles (Fuchs, Vican, & Milanović Litre, 2011), or the foothold for the National Curriculum Framework (MZO, 2017), are the respect for human rights and children's rights, democracy, the European dimension of education and interculturalism.

For competent and sustainable responses to radicalization, transparent structures and clear procedures are crucial for every institution of formal education, and teachers should be trained to follow them (Nordbruch, 2016).

In their training, teachers have acquired skills to foster resilience, provide multiple perspectives and encourage self-reflection among students, while reinforcing the acceptance of social, cultural and religious differences. Moreover, teachers are trained to respond to expressions of hatred and calls to violence in classrooms. Considering all this, it can be concluded that teachers and school do not have to develop completely new strategies of prevention – they already have experience with handling difficult situations and conflicts, which can serve as a useful starting point for the prevention of radicalization (Nordbruch, 2016). It is important to keep in mind the amount of work and responsibilities teachers already have in school and try not to overload them with additional work, which they probably do not have the time for. Building up on schools' existing resources is a desirable way of dealing with this rising problem.

Finally, we have to keep in mind that this study reflects the police officers' perception of the role of school in preventing radicalization and violent extremism. This notion limits the generalizability of these results, since police officers have different traits than the rest of the population and specific training and experience regarding extremism. It is also important to be aware that participants in this study are the police officers who are also students at the Croatian Police Academy, which means that they are up-and-coming members of the Croatian police whose police career is just about to begin. In the future research, it would be useful to compare attitudes of the police officers considering their work experience, and compare police officers' attitudes to the ones of civil population. Knowledge on radicalisation process probably affects participants' opinion about the importance of various stakeholders in the prevention of radicalisation. Also, it is important to investigate how schools themselves, including the administrative staff, teachers and students, see their role in the prevention of radicalisation. Future research should investigate students' experience with radicalisation, i.e. with radicalised individuals or groups trying to recruit them. Online grooming and radicalisation are a part of contemporary society, the responsibility of which partly falls to schools to explore. Approaching this problem from multiple points of view could provide better understanding of this topic. In order for the police and schools to cooperate, it is important that both side become aware of their role in the prevention of radicalisation. The obtained results reveal that police officers perceive the role of school in preventing radicalization and violent extremism to a certain extent, but their perception should be broadened. It is encouraging that Croatian police officers understand that education is an important factor in young people's socialization. It should also be stressed that the respondents of this study perceive the corrective role of education institutions and expect school to mitigate negative impacts of online propaganda and economic crisis on their pupils. These results implicate that schools should include in their curricula education about the usage of Internet and stimulate students to assess critically information they see and hear in the media. Also, schools should educate students about the potential impacts of financial crisis on society, especially creating radicalistic individuals and groups. The police could provide schools with necessary resources for prevention, such as educating teachers and students about radicalisation and its means of entering the lives of young people. This is a promising foundation for the future joint involvement of the police and school system in preventing radicalization and violent extremism.

#### REFERENCES

- Aiello, E., Puigvert, L., & Schuber, T. (2018). Preventing violent radicalization of youth through dialogic evidence-based policies. *International Sociology*, 33(4), 435–453.
- Altaras Penda, I. (2005). Temeljne vrijednosti Europske Unije Od utopije do stvarnosti [The European Union's core values From utopia to reality]. *Politička misao*, 42(3), 157–172.
- Bašić, J. (2009). *Teorije prevencije: Prevencija poromećaja u ponašanju i rizičnih ponašanja djece i mladih* [Prevention theories: Prevention of behavioural disorders and risky behaviours of children and young people]. Zagreb: Školska knjiga.
- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husén, & T. N. Postlethwaite (Eds.), *International Encyclopedia of Education* (pp. 1643–1647). Oxford: Elsevier Sciences.
- Butt, R., & Tuck, H. (2014). European counter-radicalisation and de-radicalisation: A comparative evaluation of approaches in the Netherlands, Sweden, Denmark and Germany. Institute for Strategic Dialogue. Retrieved from https://www.eukn.eu/fileadmin/Files/News/De-radicalisation\_final.pdf
- Dandurand, Y. (2015). Social inclusion programmes for youth and the prevention of violent extremism. In M. Lombardi, E. Ragab, V. Chin, Y. Dandurand, V. De Vitis, & A. Burato (Eds.), *Countering radicalisation and violent extremism among youth to prevent terrorism* (pp. 23–36). Amsterdam: IOS Press.
- De Silva, S. (2016). Role of education in the prevention of violent extremism. New York: World Bank.
- El-Muhammady, A. (2018). The role of universities and schools in countering and preventing violent extremism: Malaysian experience. In C. Echle, R. Gunaratna, P. Rueppel, & M. Sarmah (Eds.), Combatting violent extremism and terrorism in Asia and Europe: From cooperation to collaboration (pp. 95–110). Singapore: Konrad-Adenauer-Stiftung.
- European Commission. (2014). *Europeans in 2014* (Standard Eurobarometer 415). Retrieved from http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs\_415\_en.pdf
- Freilich, J. D., Adamczyk, A., Chermak, S. M., Boyd, K. A., & Parkin, W. S. (2014). Investigating the applicability of macro-level criminology theory to terrorism: A county-level analysis. *Journal of Quantitative Criminology*, 31(3), 383–411.
- Gereluk, D., & Titus, C. (2018). How schools can reduce youth radicalization. Šolsko *polje: Radicalization, Violent Extremism and Conflicting Diversity*, 29(5-6), 33–50.
- Härkönen, U. (2007). The Bronfenbrenner ecological systems theory of human development. In A. Slahova (Ed.), *Scientific articles of V International Conference Person. Color. Nature. Music.* (pp. 9–22). Latvia: Daugaupils Univerity.
- Henry, V. (2014). The need for a coordinated and strategic local police approach to terrorism: A practitioner's perspective. In D. Lowe, A. Turk, & D. K. Das (Eds.), *Examining political violence: Studies of terrorism, counterterrorism and internal war* (pp. 103–126). Boca Raton: CRC Press.

- Inter-agency Network for Education in Emergencies [INEE]. (2017). *INEE thematic paper An introduction to education and preventing violent extremism*. Retrieved from http://s3.amazonaws.com/inee-assets/resources/INEE\_Thematic\_Paper\_-\_education\_and\_PVE.pdf
- Kozaliev, Y. (2015). Investigation and prevention of violent radicalization in the Balkans: A national point of view. In M. Lombardi, E. Ragab, V. Chin, Y. Dandurand, V. De Vitis, & A. Burato (Eds.), Countering radicalisation and violent extremism among youth to prevent terrorism (pp. 198–202). Amsterdam: IOS Press.
- Kozmelj, R. (2018). Prevent-Refer-Address concept as a multi-stakeholder respons to radicalisation in the Western Balkans. In G. Meško, B. Lobnikar, K. Prislan, & R. Hacin (Eds.), *Criminal justice and cecurity in Central and Eastern Europe: From common sense to evidence-based policy-making* (pp. 87–102). Maribor: University of Maribor Press.
- Lombardi, M. (2015). Violent radicalisation concerns in the Euro-Mediterranean region. In M. Lombardi, E. Ragab, V. Chin, Y. Dandurand, V. De Vitis, & A. Burato (Eds.), Countering radicalisation and violent extremism among youth to prevent terrorism (pp. 83–100). Amsterdam: IOS Press.
- Macaluso, A. (2016). From countering to preventing radicalization through education: Limits and opportunities. The Hague: The Hague Institute for Global Justice.
- Meško, G., Fields, C. B., Lobnikar, B., & Sotlar, A. (2013). Introduction to Handbook on policing in Central and Eastern Europe. In G. Meško, C. B. Fields, B. Lobnikar, & A. Sotlar (Eds.), *Handbook on policing in Central and Eastern Europe* (pp. 1–4). New York: Springer.
- Ministarstvo znanosti i obrazovanja [MZO]. (2017). *Okvir nacionalnoga kurikuluma* [National curriculum framework]. Retrieved from https://mzo.gov.hr/User-DocsImages//dokumenti/Obrazovanje/NacionalniKurikulum/Nacionalni-Kurikulumi//Okvir%20nacionalnoga%20kurikuluma.pdf
- Fuchs, R., Vican, D., & Milanović Litre, I. (2011). *Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje te opće obvezno i srednjoškolsko obrazovanje* [National framework curriculum for pre-school education and general compulsory and secondary education]. Zagreb: Ministarstvo znanosti, obrazovanja i športa. Retrieved from http://mzos.hr/datoteke/Nacionalni\_okvirni\_kurikulum.pdf
- Murray, J. (2014). Terrorism old and new: Counterterrorism in Canada. In D. Lowe, A. Turk, & D. K. Das (Eds.), Examining political violence: Studies of terrorism, counterterrorism and internal war (pp. 207–236). Boca Raton: CRC Press.
- Nordbruch, G. (December 12, 2016). *The role of education in preventing radicalisation*. RAN Centre of Excellence.
- Preventing terrorism and countering violent extremism and radicalization that lead to terrorism: A community-policing approach. (2014). Vienna: Organization for Security and Co-operation in Europe.
- Preventing violent extremism in schools. (2016). Federal Bureau of Investigation. Retrieved from https://info.publicintelligence.net/FBI-PreventingExtremismSchools.pdf
- Preventing violent extremism through education: a guide for policy-makers. (2017). Paris: UNESCO. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000247764

- Pels, T., & de Ruyter, D. J. (2012). The influence of education and socialization on radicalization: An exploration of theoretical presumptions and empirical research. *Child & Youth Care Forum*, 41(3), 311–325.
- Ponsares, P. (2013). Policing in Central and Eastern Europe as an epiphenomenon of geopolitical events. In G. Meško, C. B. Fields, B. Lobnikar, & A. Sotlar (Eds.), *Handbook on policing in Central and Eastern Europe* (pp. 5–14). New York: Springer.
- Prislan, K., Černigoj, A., & Lobnikar, B. (2018). Preventing radicalisation in the Western Balkans: The role of the police using a multi-stakeholder approach. *Revija za kriminalistiko in kriminologijo*, 69(4), 257–268.
- Ramboll. (2017). Efforts to prevent extremism in the Nordic countries: Mapping. Copenhagen: Ramboll.
- Ricijaš, N., Kovčo-Vukadin, I., & Dodig Hundrić, D. (2017). Osnaživanje maloljetničkog pravosudnog sustava u protuterorističkom kontekstu: Osnaživanje kompetencija i učenje između dionika (JUST-2015-JCOO-AG-TERR) Nacionalni (projektni) izvještaj Republika Hrvatska [Empowering the juvenile justice system in counterterrorism contexts: Strengthening competencies and learning between stakeholders (JUST-2015-JCOO-AG-TERR) National (project) report Republic of Croatia]. Zagreb: Edukacijsko-rehabilitacijski fakultet Sveučilišta u Zagrebu.
- Schmid, P. (2011a). Definitions of terrorism. In P. Schmid (Ed.), *The Routledge hand-book of terrorism research* (pp. 39–157). London: Routledge.
- Schmid, P. (2011b). Literature on terrorism. In P. Schmid (Ed.), *The Routledge hand-book of terrorism research* (pp. 457–474). London: Routledge.
- Sozer, M. A., Sevinc, A., & Ozeren, S. (2015). Police officers' perception of community policing in countering violent extremism: an exploratory study. In M. Lombardi, E. Ragab, V. Chin, Y. Dandurand, V. De Vitis, & A. Burato (Eds.), *Countering radicalisation and violent extremism among youth to prevent terrorism* (pp. 203–219). Amsterdam: IOS Press.
- Teacher's guide on the prevention of violent extremism. (2016). Paris: UNESCO. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000244676
- United Nations, General Assembly. (2015). *Plan of action to prevent violent extremism*. Retrieved from http://unoy.org/wp-content/uploads/UN-Plan-of-Action-to-Prevent-Violent-Extremism.pdf
- Vidino, L., & Brandon, J. (2012). *Countering radicalization in Europe*. London: International Centre for the Study of Radicalisation and Political Violence.
- Wubbels, T., Den Brok, P., Veldman, I., & Van Tartwijk, J. (2006). Teacher interpersonal competence for Dutch secondary multicultural classrooms. *Teachers and Teaching: Theory and Practice*, 12(4), 407–433.

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## Corporate Intelligence as the New Reality: The Necessity of Corporate Security in Modern Global Business

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## Miha Dvojmoč

#### Purpose:

This paper seeks to address the necessity of corporate intelligence and its use in modern global business, as corporate security, to the wider expert community and academic community. The key concepts of corporate intelligence, competitive intelligence, sources and types of data collection, including phases of the competitive intelligence process are presented. The purpose of this paper is to define the key legal sources, relevant for corporate intelligence in the Republic of Slovenia, thereby establishing the normative framework for data collection in the Republic of Slovenia. The objective of this research is to define potential misuse that modern organisations must be aware of if they wish to successfully, and primarily safely, operate at the global level.

#### Design/Methods/Approach:

Literature review was conducted in order to achieve the articles purpose. In legal part of the paper, legal research methodology was implemented. The primary sources of law as cases, statutes etc. were analysed and law reviews, legal dictionaries and legal encyclopaedias for background information about a researched topic were added.

#### Findings:

Corporate intelligence, with an emphasis on competitive intelligence, and the mere awareness of the need for corporate security in the modern global business represent an inevitable step towards competitive and safe global business, with an awareness of external risks, exploiting their own advantages and knowledge of market characteristics.

#### Practical Implication:

Increased awareness in modern organisations that want to conduct their business safely, primarily from the perspective of global business. Present the risks on the market, as well as opportunities of their own competitive development. Offer a tool for managing challenges and upgrading business operations from the perspective of competitiveness and security on the market.

#### Originality/Value:

The article presents the concept of corporate intelligence with an upgrade to competitive intelligence, and represent corporate security as an unavoidable

and necessary tool for risk management, as well as achieving competitiveness and security in the global business. The findings are intended for all organisations, but primarily those that operate globally – or their managers, directors, owners, entrepreneurs and persons responsible for security systems in organisations. With regard to that, the article relates to these areas of practice, and is of use to scholars in assisting them to disentangle the various aspects of corporate intelligence, and also to managers who wish to gain an appreciation of the potential which competitive intelligence can bring to business success.

#### UDC: 005.934

Keywords: corporate intelligence, corporate security, business, globalisation

#### Korporativna obveščevalna dejavnost kot nova realnost: Nujnost korporativne varnosti v sodobnem globalnem podjetništvu

#### Namen prispevka:

V prispevku želi avtor širši strokovni javnosti in tudi akademski skupnosti predstaviti nujnost korporativne obveščevalne dejavnosti oz. njene uporabe v sodobnem globalnem podjetništvu v obliki korporativne varnosti. Predstaviti ključne koncepte korporativne obveščevalne dejavnosti, vključno s konkurenčno obveščevalno dejavnostjo ter vire in zvrsti pridobivanja podatkov, vključno s fazami procesa konkurenčne obveščevalne dejavnosti. Opredeliti ključne pravne vire, ki so relevantni za korporativno obveščevalno dejavnost v Republiki Sloveniji in s tem postaviti normativni okvir zbiranja podatkov v Republiki Sloveniji. Opredeliti možne zlorabe, ki se jih morajo zavedati sodobne organizacije, če želijo uspešno in predvsem varno poslovati na globalnem nivoju.

#### Metode:

Opravljen je bil pregled literature. V pravnem delu prispevka je avtor implementiral pravno raziskovalno metodologijo, analiziral primarne vire, kot so primeri pravne prakse in pravni akti, ter uporabil preglede pravnih virov, pravnih slovarjev in enciklopedij za vzpostavitev pravnih pojmov o raziskovani tematiki.

#### **Ugotovitve:**

Korporativna obveščevalna dejavnost s poudarkom na konkurenčni obveščevalni dejavnosti in samo zavedanje nujnosti korporativne varnosti v sodobnem globalnem podjetništvu predstavljajo neizogiben korak na poti h konkurenčnemu in varnemu globalnemu poslovanju, z zavedanjem zunanjih tveganj ter izkoriščanjem svojih prednosti in poznavanjem tržnih značilnosti.

#### Praktična uporabnost:

Dvig ozaveščenosti sodobnih organizacij, ki želijo poslovati varno, predvsem z vidika globalnega poslovanja. Predstaviti tveganja, ki jim na trgu pretijo, oziroma možnosti njihovega lastnega konkurenčnega razvoja. Ponuditi orodje obvladovanja izzivov in nadgradnje poslovanja z vidika konkurenčnosti in varnosti na trgu.

#### Izvirnost/pomembnost prispevka:

Prispevek predstavlja koncept korporativne obveščevalne dejavnosti z nadgradnjo v konkurenčno obveščevalno dejavnost in korporativno varnost kot tako prikazuje kot neizogibno potrebno orodje obvladovanja tveganj ter doseganja konkurenčnosti in varnosti v globalnem podjetništvu. Ugotovitve prispevka so namenjene vsem organizacijam, predvsem pa tistim, ki poslujejo globalno, oz. njihovim menedžerjem, direktorjem, lastnikom, podjetnikom in odgovornim za varnostne sisteme v organizaciji. Upoštevajoč navedene praktične sfere prispevek predstavlja uporabno orodje akademikom in raziskovalcem pri definiranju različnih vidikov korporativne obveščevalne dejavnosti ter menedžerjem, ki želijo s konkurenčno obveščevalno dejavnostjo uspešno poslovati.

#### UDK: 005.934

Ključne besede: korporativna obveščevalna dejavnost, korporativna varnost, podjetništvo, globalizacija

#### 1 INTRODUCTION

Corporate security as a part of the comprehensive security in an organisation or enterprise revolves around various areas and aspects of activity, which indisputably includes the corporate intelligence, with economic or business intelligence and competitive intelligence as the dominant forms. In this regard, this article intends to present the corporate intelligence's necessity and its use in modern global business, as corporate security, to the wider expert community and academic community. Working through the key concepts of corporate intelligence, including competitive intelligence, sources and types of data collection, including phases of the competitive intelligence process, we define the key legal sources, relevant for corporate intelligence in the Republic of Slovenia, thereby establishing the normative framework for data collection in the Republic of Slovenia. On top of that and with the help of that, we define potential misuse that modern organisations must be aware of if they wish to successfully, and primarily safely, operate at the global level.

The corporate intelligence could represent a tool of increased awareness in modern organisations that want to conduct their business safely, primarily from the perspective of global business, taking into account the risks on the market, as well as opportunities of their own competitive development. As a tool for managing challenges and upgrading business operations from the perspective of competitiveness and security on the market, the mere awareness of the need for corporate security in the modern global business represent an inevitable step towards competitive and safe global business, with an awareness of external risks, exploiting their own advantages and knowledge of market characteristics.

The primary aim of the article is to present the concept of corporate intelligence with an upgrade to competitive intelligence, to reinforce the perception of the corporate security as an unavoidable and necessary tool for risk management, as well as for achieving competitiveness and security in the global business. The main aspect of the article is a review of key concepts - deriving from

(integral) corporate security, followed by corporate intelligence, with emphasis on economic or business intelligence and competitive intelligence as the dominant forms or corporate intelligence. Inevitably, we present the sources and types of data collection in competitive intelligence along with the stages of competitive intelligence process. The article also presents the normative framework for data collection in the Republic of Slovenia, and addresses the potential abuses.

In the paper, the literature review on corporate intelligence and similar concept is presented. Legal part of the study involves analysis of the primary sources of law as cases, statutes etc. to identify and retrieve information necessary to support legal decision-making. We also search secondary sources like law reviews, legal dictionaries and legal encyclopaedias for background information about the topic.

#### 2 DEFINITIONS OF KEY CONCEPTS

### 2.1 (Integral) Corporate Security

Integral (corporate) security is a relatively new concept in the corporate governance and is dealing with those undesirable outcomes that might endanger resilience and survival of the organization. Rising number of threats that might have a negative impact on the business has resulted in creation of Chief Security Officer (CSO) (Aksentijevic Forensic and Consulting, n. d.). As part of the comprehensive security in an organisation or enterprise, corporate security involves adopting and implementing a corporate security policy, and includes numerous areas of activity, among them (Dvojmoč, 2019):

- ensuring legal and uninterrupted business operations;
- protection against risks and threats (by assessing risks and threats specific
  for the critical infrastructure, organisation, assessment, protection and
  detection of unlawful actions within the organisation, deceit and fraud to
  the detriment of the organisation, and, in this regard, implementation of
  intelligence and counter-intelligence measures within the organisation);
- legal protection of information system technologies (IT security);
- corporate protection of real rights and intellectual property rights (including corporate protection of property rights and other real rights of the organisation, protection of patents, brands, models, original of products, and protection of organisation's material copyrights);
- providing physical and technical security (which includes corporate arrangement for protecting organisation's property, supervision over security tasks of internal or external services, and security planning and risk assessment);
- ensuring a safe work environment by protecting people and personal data, legal arrangement of safe environment, and legal arrangement of health and safety at work;
- corporate human resources management and administration.

As such, the concept is relevant for all organisations, primarily those that operate globally, for their managers, directors, owners, entrepreneurs and persons

responsible for security systems in organisations. Disentangling the various aspects of corporate intelligence, and gaining an appreciation of the potential which competitive intelligence can bring to business success, is necessary to achieve the above-mentioned goals, as presented below.

### 2.2 Corporate Intelligence

Within the concept of corporate security, we can discuss a narrower concept, corporate intelligence, which includes economic or business intelligence and corporate or competitive intelligence as hyponyms of corporate intelligence.

Etymologically, the word *intelligence* is derived from Latin *intelligene* (*intellego*, *intellegis*, *intellegere*, *intellexi*, *intellectum*), which can mean to detect, notice, realise, comprehend, understand, to be skilled, think, consider, imagine.

Intelligence is a very wide concept, which Richelson (in Purg, 1995) defined as "the results of collecting, analysing, combining and interpreting all available data that concern one or more aspects of a foreign country or operating area, which is directly or potentially significant for planning." Müller-Wille (2004) has a similar definition, but differentiates between different types of intelligence based on their function (military intelligence, which collects and studies information on current and potential activities of foreign armed forced inside and outside the national territory; security intelligence, which collects and studies threats to the constitutional arrangement; criminal intelligence, which conducts activities of fighting organised crime; and external intelligence, which focuses on activities abroad, and its purpose is to provide support for foreign political decision-making and situation assessment of security, defence, external and security policies). The development of traditional intelligence services is heading towards "privatisation" of intelligence, with the aim of forming and developing a new discipline, i.e. economic inquiry or competitive intelligence, which can be used in another (corporate or business) world.

# 2.3 Economic and Competitive Intelligence as the Dominant Forms or Corporate Intelligence

In the field of economy, we encounter several conceptual definitions of corporate intelligence. The most prevalent concepts are economic or business intelligence and corporate or competitive intelligence. In the Slovenian setting, we encounter concepts such as business intelligence, business information and economic inquiry (Ulcej, Britovšek, & Sotlar, 2011).

The term economic intelligence is used to describe the collection of business-relevant economic information, including technological data, financial, commercial proprietary and government information, whose acquisition by foreign interested parties either directly or indirectly contributes to a relative increase of productivity or improved competitive economic position of the country, in which the organisation or enterprise acquiring such information is located (Porteous in Potter, 1998). In the framework of economic intelligence,

Henri Martre (in Potter, 1998) distinguishes between primary and secondary, and tactical and covert economic intelligence. Primary and secondary economic intelligence represent the collection of publicly available information from open sources (the difference is only in the level of difficulty to obtain information); in tactical economic intelligence, information originates from more difficult to access, privileged sources (e.g. consumer research, personal contacts, etc., and includes, for example, internal information on an enterprise, cost and sales analyses, information on studies, development, key projects, etc.); in the case of covert economic intelligence, information is obtained illegally, is confidential and, as such, legally protected.

Economic Intelligence aims to take advantage of this opportunity to develop better methods for the identification of relevant sources of information, the analysis of the collected information and its manipulation to provide what the user needs for decision making. Focused mostly on information available outside the organisation, the scope of Economic Intelligence covers wide fields ranging from technology to market or legal topics and is closely linked to other information management approaches such as Knowledge Management or Business Intelligence (Economic intelligence, 2002). Economic Intelligence concerns the set of concepts, methods and tools which unify all the co-ordinated actions of research, acquisition, treatment, storage and diffusion of information, relevant to individual or clustered enterprises and organisations in the framework of a strategy (Bellinger in Economic intelligence, 2002).

Competitive intelligence is a concept, first used in the 1980s, and developed at Motorola – Jan Herring, an associate expert was the first to use the term *competitive intelligence* in English (Galvin, 1997).

Competitive intelligence is a systematic and ethical programme for collecting, analysing and managing information that can potentially affect plans, decisions and operations of an enterprise. Considering the purposes and goals, competitive intelligence is a process of increasing competitiveness on the market by improving the understanding of enterprise's competitors and its competitive environment. Information can be collected from publicly available sources, and is focused on the competition – its purposes, goals, marketing, etc. Based on this information, the enterprise can adapt its strategy, thus successfully defending against competitor's attempt to reduce its market share or to completely push it out of a specific market. It is also often used to collect and analyse data for proving unfair competition.

Havenga and Botha (2003) define competitive intelligence as an internationally recognised tool that allows organisation to maintain their competitiveness on the global level. Its purpose is therefore to provide support and consultancy to enterprises, which are reflected in management decision making and activities.

As stated by Lönnqvist and Pirttimäki (2006), most European academics define business intelligence as a wide concept that represent management and transformation of business information into intelligence products, with the purpose of providing support in decision making, thus achieving the goals of the organisation. The latter definition thus also includes competitive intelligence, which, according to the definition by the Society of Competitive Intelligence Professionals (SCIP), encompasses monitoring of the competitive environment

and internal activity through an analysis of findings, with the purpose of providing support for the decision-making process. This helps management in enterprises form better decision-making strategies, primarily in marketing, development and investments. In this respect, legality and ethics of collecting information and controlled distribution of intelligence to decision makers is often emphasised. Competitive intelligence is thus defined as a way to provide competitive advantage or facilitate decision making through collecting, analysing and managing information related to the business environment in which an enterprise operates (SCIP, n. d.).

As the widest concept, most Slovenian authors use the term of economic inquiry, which is then further divided into several stages, specifically: business intelligence, competitive intelligence, industry intelligence, due diligence of a good manager, marketing intelligence, social inquiry and defensive economic inquiry (Dvoršak, 2003; Gjerek, 2009; Žaže, 2007).

Dvoršak (2003) defines business intelligence as collecting, organising and utilising data, primarily by management, with the purpose of good decision making, specifically in an ethical and lawful manner.

In light of the above, we can say that definitions of key concepts of corporate security and corporate intelligence represent a certain challenge – or in other words, concepts that must be introduced, presented and established as necessary in organisation, particularly in the time of globalisation and IT development. For this purpose, we describe various aspects of operation, usability and indispensability of these presented concepts, as well as their advantages and potential disadvantages, by presenting the regulatory and legal framework and misuse in light of the discussed subject.

## 3 ECONOMY AND COMPETITIVE INTELLIGENCE AS A PART OF A BUSINESS PROCESS

Economic activity is any activity that is carried out against payment on the market (Zakon o preprečevanju omejevanja konkurence, 2008). As stated by Črnčec (2008), it is necessary to understand the distinction of intelligence based on the entity conducting such activities. If these activities are carried out by a national intelligence service in the economic field, this represents an economic intelligence. If such activities are carried out by enterprises, this represents competitive intelligence, which is the focus of this article.

The goal of forming a successful strategy in an organisation is to primarily create and maintain a competitive advantage over one's competition. In this way, competitive intelligence represents a source of a more permanent competitive advantage. It is necessary to make sure that it contributes prompt, relevant and analysed products that, together with the know-how of experts in the field of competitive intelligence, help form and manage the organisation's strategy (Hughes, 2005).

Organisations of all types and sizes have always faced the need for information management. Globalisation, the spread of information and communication technologies, the construction of formal and informal networks, the acceleration

of economic change, the evolution of relationships between the makers of finished products and their suppliers, the introduction of customer relationship management, and the shortening of product life cycles, among other things, has led to permanent changes in the day-to-day management of the enterprises (Economic intelligence, 2002).

Facing a growing quantity of data, it is necessary to adopt a pragmatic and primarily effective method for reviewing and managing data and information, which will help decision making in organisations. Today, an entrepreneur without a strategy can obtain a vast quantity of information, which is meaningless if he does not know how it can be used or exploited. Therefore, a good strategy – the result of a dialectic process between the internal situation and external environment – must be adopted. It is also important that all enterprise sectors are included in the needs analysis. The plan for collecting information must be focused on what is most important for the organisation in terms of ensuring competitiveness. The goal of the organisation is to maintain its position on the market or to increase its market share. For this purpose, it is necessary to monitor external factors, primarily legislation and regulation, social and political trends, economic movements, intellectual property and patents, clients, technological development and the global market (Economic intelligence, 2002).

The process of competitive intelligence in organisations must include not only collecting internal and external information from competitors, but also from clients, suppliers, technology, environment, and potential business relationships. In such cases, the process of competitive intelligence provides an early warning system and helps predict activities by competitors, clients and governments (Gilad in Calof & Wright, 2008).

Management of small and medium-sized enterprises must thus face external and internal information. This process – which we can call a comparative analysis – includes primarily three phases, specifically: confrontation, comparison and calibration (Economic intelligence, 2002). In the following chapters, we give a detailed presentation of the types of data collection and the stages of the competitive intelligence process.

### 3.1 Sources and Types of Data Collection in Competitive Intelligence

The need for an improved information delivery process has become widely accepted over the past decade. For this reason, a growing number of enterprises is considering the options for developing and conducting competitive intelligence processes. They are aware of the value and the applicability of investments into new, modern competences, which are reflected in investment into competitive intelligence programmes (Gračanin, Kalac, & Jovanović, 2015).

Consistent collection of the right information at the right time is based on a continuous process of information and policy established at the level of the European Union (Economic intelligence, 2002).

There are many sources of information on competitors that can be used in the competitive intelligence process. Employees who are in direct contact with clients represent the most important source of information. Competitors have established extensive communication with their suppliers, clients, distributers, shareholders and levels of government. Contact with these sources can provide plenty high-quality and useful information to an enterprise. Another good source of information is following trade magazines, fairs, advertising, websites, annual reports, etc. In this regard, a careful selection of data sources, data reliability and timely acquisition of information are very important. In most cases, enterprises list the Internet, personal contact, employees, published information and external distribution channels as the most important information sources (Gračanin et al., 2015).

Software providers have developed special software for the competitive intelligence process, which supports the data collection process on competitors, simplifies procedures for data mining and analysis, and supports decision making based on systematic databases. Thus, decision makers can simplify the information collection process and become more effective in competitive intelligence (Gračanin et al., 2015).

Enterprises have two options regarding the agents for the competitive intelligence process, specifically: internal or external providers of competitive intelligence. Enterprises can decide to establish their own departments in charge of systematic data monitoring and analysis, and submission of such data to persons responsible. The latter is primarily suitable for large enterprises and organisations with sufficient human and financial resources available to implement an internal competitive intelligence system. On the other hand, enterprises can hire an external competitive intelligence provider, who will provide the required intelligence products to management. Here, we should emphasise certain advantages of an external system, such as investigators' experience, production of more concrete recommendations and, primarily, time savings (Vrenko Peruško, 2004).

### 3.2 Stages of Competitive Intelligence Process

In different literature, we can find quite a few versions of the intelligence cycle, which are quite similar. Liebowitz (2006) thus divides the intelligence cycle of competitive intelligence into four stages, specifically: collection, synthesis, analysis, and strategy development. The author emphasises that data and information collection is the most important initial step in competitive intelligence. According to Kahaner (in Anžič, 2010), this step represents the collection of raw data and information from various sources for the purpose of forming the final product. He points out that creative individuals can obtain such information and data legally and ethically. The nest stage – the synthesis stage – represents refining of collected information into meaningful segments and summaries, followed by the analysis stage (Liebowitz, 2006), which is a more productive and future-oriented stage than the synthesis stage. According to Kahaner (in Anžič, 2010), the analysis is the most complex stage of the intelligence cycle. It requires exceptional decisiveness, resourcefulness and analytical expertise, as it needs to find patterns and obtain information, and finally meaningfully shape said information and form well-founded conclusions about the results. Thus, the purpose of the analysis is to generate intelligence products that help an organisation strategically improve decision making. In the competition and environment analysis stage, enterprises have to focus only on specific information. The latter is essential for the general success and effectiveness of an enterprise, as managers cannot use all acquired information at every moment (Gračanin et al., 2015). The last stage of the process is called strategy development, which includes both short-term and long-term development of a business strategy in an enterprise. Along with strategy development, new needs are arising for information and data for the purposes of adapting the strategy of the organisation, which results in a new competitive intelligence cycle (Liebowitz, 2006).

The review of literature has shown that different authors list different variations of intelligence cycle, which have four to eight separate stages or phases on average. These differences are mostly different names of individual stages and different breakdowns of the cycle; however, individual stages are very similar in terms of content.

In all organisations, the intelligence cycle of competitive intelligence starts on the basis of the same needs. Once demand and goals for information are determined in an enterprise, the process of collection, storage and analysis of available information is implemented, focusing on obtaining answers required for easier decision making and action. Throughout the data collection process, feedback is very important, ensuring that the intelligence process can be adapted, as it has to be constantly adapted to new changes in the world (Economic intelligence, 2002).

Another version of the intelligence cycle includes multiple stages, and on every individual step, the consequences have to be resolved (Economic intelligence, 2002). Objective represents a starting point, from which we progress to data collection. Process data results in storing of data, and with dissemination the analysis is performed. The next step is action, which proceeds again to the objective, although if during analysis the additional information is required, we must return to data collection. Moreover, if the redefinition is needed, the action phase is skipped, and we continue with setting the objective.

The intelligence cycle is a transformation of a mass of data, available in various forms, first into information, then into knowledge, and ultimately into 'intelligence' or intelligence product (Economic intelligence, 2002).

## 3.3 Open Source Intelligence (OSINT) as Data Collection Method in the Corporate Intelligence

As also recognized by Britovšek, Tičar and Sotlar (2017), the data collection as one of the fundamental elements of intelligence can be categorized according to different intelligence disciplines, among which collecting from publically available sources in the form of the open source intelligence (OSINT), along with human intelligence, signals intelligence and imagery intelligence, represents one of key processes of identifying and retrieving information necessary to support legal decision-making. Britovšek et al. (2017) point out OSINT as crucial in collecting and analysing the data in the private sector, where private citizens are limited mainly to open source collection. Other entities or rather subjects of public

and private security sector have broader range or certain legal entitlements that enable them to collect beyond OSINT, still open source intelligence remains one of the most recognized aspect of data collection as found in their study - 86 % of respondents who perceive their work as private intelligence or counterintelligence uses OSINT (Britovšek et al., 2017).

OSINT as one of the stages of competitive process. The intelligence community has been involved in OSINT for a better half of century, and is defined as "intelligence produced from publicly available information that is collected, exploited, and disseminated in a timely manner to an appropriate audience for the purpose of addressing a specific intelligence requirement" (Williams & Blum, 2018). If anything, OSINT has become more complex in terms of sources and methods with the evolution of internet and the rise of social media. As such its crucial aspect is and will be a legal point of view in gathering the information, even if from open sources. Protecting the individuals, managing massive quantities of data, leveraging private sector tools and entities to the fullest possible extent, are only a few of possible problematic areas of OSINT use. Exploitation of open source intelligence brings with a wide variety of legal dilemmas, which connect to the privacy and data protection, primarily (but not exclusive to) the collection and retention of information in regard to social media data and in accordance to the Regulation (EU) 2016/679 of the European parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). The dynamics of social media in comparison with news media and legally attainable literature, where these (and other) aspects are less present or even non-existent - carry with a huge responsibility for the intelligence collectors and analysts. Besides privacy and data protection, Cuijpers (2013) argues the domain of intellectual property rights as another legal point of view, which should also be acknowledged when dealing with OSINT as corporate intelligence. Those issues alone argue the importance and dependence on national legislation.

The technology holds various and broad aspects of intelligence operations, arising new questions about ethics and legal challenges for the intelligence community. Eijkman and Weggemans (2013) argue even the OSINT's increased use of open source information needs to be balanced for safety and security purposes by assessing what accountability in a digital world should entail (in regard to state security entities). Taking that to the private sphere and using it in the corporate world, takes it up a notch, as we point out in the next chapter on normative framework for data collection.

## 4 NORMATIVE FRAMEWORK FOR DATA COLLECTION IN THE REPUBLIC OF SLOVENIA

Private intelligence companies are limited to publicly available data in data collection and acquisition. The latter is defined in provisions of certain laws listed below.

The Companies Act (Zakon o gospodarskih družbah [ZGD-1], 2006) defines the concept of trade secret, with the enterprise setting the way such trade secret is protected and the responsibility of persons obligated to protect it. Any actions, whereby persons outside the enterprise try to obtain data considered a trade secret, is prohibited, if such actions violate the law and enterprise's intention.

Since April 2019, the Trade Secrets Act (Zakon o poslovni skrivnosti [ZPosS], 2019) is also in effect, which transposes into the Slovenian legal framework the EU directive aiming to standardise the concept of trade secrets within the EU and to provide adequate and harmonious levels of modern protection. Consequently, a new law would introduce increased transparency and raise the level of protection for trade secrets, thereby indirectly affecting the protection of knowledge, experience and business information of enterprises, their competitiveness and performance.

Article 1 of ZPosS (2019) states that the act "regulates the area of trade secrets, rules for determining and protecting trade secrets against their unlawful acquisition, use and disclosure," thus defining right at the start the three most common risks threating trade secrets. ZPosS (2019) provides a new definition of trade secret as follows: "A trade secret includes undisclosed know-how and business information that meet the following requirements: – is a secret that is not generally known or easily accessible to persons in circles groups that normally handle such type of information; – has a market value; – the holder of trade secret has taken reasonable actions to keep it secret in given circumstances."

ZPosS (2019) defines a lawful acquisition, use and disclosure of trade secret, as well as unlawful acquisition, use and disclosure of trade secret. The acquisition of trade secret is considered lawful "if it is obtained by independent discovery or creation; observation, study, dismantling into components or testing of product or object that was made available to the public or is legally owned by the acquirer who is under no applicable legal obligation restricting acquisition of trade secret; exercising a right of workers or worker representatives to information and consultation in accordance with applicable regulation, when such a disclosure is required for that purpose; any other action considered in compliance with fair business practices under the given circumstances, or exercising a right to access public information". Furthermore, a trade secret is acquired lawfully if the acquisition, use or disclosure of trade secret is defined by another law or EU regulation, if the party is ordered to do so by a final and enforceable court decision, or if the party is required to do so for the purposes of an investigation by the inquiry commission of the National Assembly of the Republic of Slovenia.

Article 5 of ZPosS (2019) defines unlawful acquisition of trade secret as an acquisition "carried out by direct unauthorised access, theft or copying of documents, objects, material, content or electronic files that contain a trade secret or could help discover a trade secret, or by any other action that is considered in violation of fair business practices", or "if obtained from a person who used or disclosed a trade secret unlawfully, and the acquirer was aware or should have been aware of this at the time". In Article 5, ZPosS (2019) defines unlawful use and disclosure of trade secret as use or disclose by third party that meets one of the following conditions: (1) the trade secret was acquired unlawfully; (2) the person

violates a confidentiality agreement or other obligation of non-disclosure in relation to the trade secret; (3) the person violates a contractual or other obligation to restrict use of the trade secret; (4) at the time of use or disclosure, the person was aware or should have been aware that the trade secret acquired from another person was used or disclosed unlawfully. Furthermore, unlawful use of trade secret includes "producing, offering or making available on the market of any goods that is the subject of a violation, or importing, exporting or warehousing for these purposes, when the person that is carrying out any of these activities was aware or should have been aware under the given circumstances that the trade secret was used unlawfully".

Additionally, Article 8 of the Industrial Property Act (Zakon o industrijski lastnini [ZIL-1], 2001) defines the official confidentiality of records regarding a patent application and model application in the official newsletter of the industrial property office.

The Obligations code (Obligacijski zakonik [OZ], 2001) also defines the observance of the principals of good faith and fair dealing in concluding contractual obligations, exercising rights, and performance of duties on the basis of such obligations. In their transactions, parties with contractual obligations must act according to the principle of good business practices.

Ultimately, the two most important laws in this regard are the Classified Information Act (Zakon o tajnih podatkih [ZTP], 2001), which, amongst other things, provides specifics on the handling of classified information for all persons that were given access or became aware of such information, and the Criminal Code (Kazenski zakonik [KZ-1], 2008), which defines criminal offences and relevant criminal sanctions.

An enterprise is allowed to acquire and analyse data from publicly available sources, but has no right to encroach on an individual's right to privacy (Britovšek, 2017). The Private Detective Services Act (Zakon o detektivski dejavnosti [ZDD-1], 2011) gives special status to detectives, who are allowed under certain circumstances to use specific methods for collecting data. Here we should point out the following entitlements of detectives, as listed in Article 27 of ZDD-1 (2011):

- collection of data from persons or publicly available sources
- acquisition of data from licences
- acquisition of data based on personal perception
- use of technical means for data acquisition

As part of collection of data from persons or publicly available sources, a detective may collect information directly from persons to which such data refers to, as well as from persons who have such data at their disposal if it is submitted voluntarily, and from publicly available sources. Furthermore, per written authorisation of a client, a detective may acquire data from certain records (records of registered vehicles, records of permanent residency and central population register, records of insured persons, aircraft register and the Slovenian register of ships). A detective may also access court and administrative files, and copy data from such files when the party that authorised the detective is entitled to do so (ZDD-1, 2011).

A detective may obtain information by direct personal perception in public places or from public places, publicly accessible closed and open spaces, and places and spaces visible from publicly accessible places and spaces. Doing so, a detective may not encroach on private closed spaces and private spaces that an individual has separated from public spaces by erecting any type of fence, obstacle or visible marking or warning, thus clearly indicating the presence of a private space. As part of their duties arising from the authorisation, a detective employing personal perception may use image-recording devices, but only when necessary for the preservation of evidence. A detective may also use audio-recording devices or other tools for the preservation of evidence and leads. A detective may use audio-recording devices exclusively on the basis of a clearly demonstrated written or recorded verbal approval by the person against whom such a device will be used (ZDD-1, 2011).

### 4.1 Risks Arising from Data Abuse

As defined by the Prevention of Restriction of Competition Act (Zakon o preprečevanju omejevanja konkurence, 2008), unfair competition represents actions by an enterprise on the market that violate good business practices, thereby causing or potentially causing damage to other enterprises. Actions of unfair competition in terms of data acquisition include primarily submission of data on another enterprise, if such data harms the reputation and business of another enterprise, and unlawful acquisition of another enterprise's trade secret or unjustified exploitation of confidential trade secret of another enterprise.

Based on EU rules on the protection of free competition, certain practices are especially forbidden. Sanctions for abuse may be fines (up to 10% of their annual turnover) or imprisonment, with special attention being paid to enterprise directors who have violated regulations. All EU members must apply and observe the competition rules, with courts having competence over supervision and compliance with rules. The rules apply to all enterprises as well as organisations whose main activity is of an economic nature (European Union, Your Europe, 2018).

Within the competition rules, we should point out unlawful contacts and agreements between enterprises or organisations, referred to as "cartels", which limit competition. The most common examples of such agreements are production limits, pricing, market division, allocation of clients, and distribution agreements between suppliers and sellers. All exchanges of information and agreements between enterprises and their competitors are considered anti-competitive practice, reducing the strategic uncertainty on the market. Disclosure of such information via telephone, e-mail, or in meeting can represent a violation of the rules. It is therefore best for enterprises not to limit production, not to exchange strategic information regarding the enterprise, not to set conditions of operations and prices, and not to share their markets. When agreements benefit the economy and consumers (listed in the Decree on block exemptions), they are not prohibited. If an enterprise has a dominant position on the market because of its large market share, it has no ensure price regulation. This means that the enterprise may not

charge unreasonably low prices that would restrict the business of other competing enterprises. Furthermore, an enterprise may not charge too high prices, set special business conditions for business partners, or cause discrimination among consumers (European Union, Your Europe, 2018).

Restrictions on competitive conduct are also set by the prohibition on competition and the non-compete clause. The prohibition of competition binds a worker in an employment relationship to be loyal to the enterprise, while the non-compete clause refers to the period after employment, when the worker no longer has a contractual relationship with the enterprise. During the employment relationship, the worker is obliged to refrain from all actions that would harm the enterprise, which means the prohibition of competitive activity. The worker must not carry out any activity or conclude transactions for non-commercial or commercial activity for their own account or account of others, worker's activity must not include activities carried out by the employer and which could represent competition to the employer, except with the approval of the employer. If the worker violates this obligation, the worker is liable for damages and subject to disciplinary action, which can result in termination of the employment contract. After the employment contract is terminated, the worker is bound by the non-compete clause, which is admissible only if the worker obtained specific knowledge and contacts that could be used to compete with the former employer. Its effect is therefore time-limited (Senčur Petek, 2016).

Enterprises and organisations often face issues of protection of trade secrets. "Any data determined as such by the enterprise management with a written decision is considered a trade secret. Company members, workers, members of corporate governance bodies and other persons obligated to protect a trade secret must be notified of such a decision. Even if data is not defined as a trade secret by a decision from the previous paragraph, data that would obviously cause significant damage if disclosed to an unauthorised person is also considered a trade secret. Company members, workers, members of corporate governance bodies and other persons are liable for disclosure of trade secret if they were aware or should have been aware of the nature of such data." (ZGD-1, 2006, Article 39)

A trade secret data has two main characteristics. The data is confidential and known to a certain group of persons; therefore, it should only be known to this pre-determined group of persons, who are not allowed to submit this data or disclose it to third parties or use it in any other way. The reason for confidentiality of trade secret must have a market value (TehnoCenter of the University of Maribor, n. d.). When a trade secret is determined by a written decision, it is necessary to precisely specify the group of persons who are aware of this secret, their responsibilities and method of protecting the trade secret. In this case, the law defines three categories of persons who are obligated to protect the trade secret: persons within the enterprise (employees, company members, etc.), persons who work for the enterprise on the basis of civil-law contracts, and persons outside the enterprise who are aware of the specific trade secret (Šutanovac, 2017).

#### 5 CONCLUSION

From its humble beginnings, where is primarily existed within the sphere of private security (in detective and private security enterprises), the use of intelligence in western enterprises managed to developed into a unique market tool, which provides the highest benefit to global multinational corporations. State borders do not represent an obstacle to the use of intelligence, and such efforts to obtain competitive advantages and to identify potential risks today benefit not only enterprises but also states. In accordance with the legislation and considering the normative and legal framework, organisation utilise corporate intelligence both for protecting their know-how, interests and secrets, and to manage risks related to information leaks or thefts (Britovšek et al., 2017).

Considering the nature of information that is the subject of intelligence, methods of acquisition and the transfer of tools from the above-mentioned sphere of private security and originally regulated intelligence services as part of national (counter) intelligence entities, we must highlight the potential shortcomings arising from the transfer of such activities to the private sphere. The need for information and their significance can potentially lead to pressure on an enterprise, which, in the process of acquiring the best or most reliable information, can get dangerously close to the line between acceptable and not-acceptable, or endangering the rights and freedoms such as privacy.

Findings by the Global Intelligence Alliance have shown that most enterprises face the need for better understanding of the complexity of external environment, and integration of such understanding into strategically planned projects (Calof & Wright, 2008). It was found that most enterprises have a need for more formal intelligence. The study had also shown that almost two-thirds of respondents in the last five years were subject to at least three large competitive events. As many as 97% of respondents replied that their enterprise has a too weak early warning system (Gilad in Calof & Wright, 2008).

The first positive effect of the electronic age is undoubtedly the availability of information. Most required information is easily accessible and often without additional expenses (Gračanin et al., 2015). As a result, commercial and other organisations that face the need for acquiring information and data are have a major advantage. However, it is up to them how, in what way and particularly to what extent they intend to focus their attention on (competitive) intelligence. According to Britovšek et al. (2017): "With the pursuit of profit in the private sphere, there is often increased willingness to abuse information and the information acquisition technology; consequently, laws are violated, and basic human rights such as the right to privacy are threatened." Private enterprises that conduct such activities are not subject to supervision that applied, or applies, to intelligence and security services of democratic states, whose supervision is clearly defined and activities strongly regulated. Organisations can defend against competitive intelligence with private counter-intelligence, which represents the same risks, as it includes strong protective measures (Britovšek et al., 2017).

In organisations that participated in the study by the Competitive Intelligence Foundation, the competitive intelligence process was directed towards the following goals: new or increased revenue, new product or service, cost reduction or avoidance, time savings, increased profit, and achieving financial goals.

They focused primarily on key intelligence subjects, such as enterprise profiles, comparative analysis of enterprises, early warning system, industry trends, buyer and supplier profiles, technology assessment, economic or political analysis, and profile implementation. The latter led to very good results in the following areas: development of entrepreneurial or business strategy, sales or business development, market entry decisions, product development, research and development decisions, merger and acquisition decisions, joint venture decisions, and legislative responses (Competitive Intelligence Foundation, 2006).

We can surmise that competitive intelligence affects a wide range of decision making and is an indispensable in developing short-term and long-term business strategy in an organisation or enterprise, particularly if we consider the global operations of organisations and IT development, which opens up organisations to new possibilities and, ultimately, threats. The success of business operations is inevitably linked to the acquisition, collection and analysis of information from legally obtained sources using business and competitive intelligence, as the selection between relevant and irrelevant information enables decision-makers to effectively make their presence in global markets. Corporate intelligence thus represent a necessary security element in every organisation, and particularly those that are globally oriented. As such, corporate intelligence is a vital and indispensable part of the modern global business world and represents its new reality.

#### REFERENCES

- Aksentijevic Forensic and Consulting. (n. d.). *Integral security (CSO)*. Retrieved from http://www.ict-forensics-consulting.com/management-consulting/integral-security-cso/
- Anžič, M. (2010). *Konkurenčna obveščevalna dejavnost gospodarskih družb* (Magistrsko delo) [Competitive intelligence in companies (Master's thesis)]. Ljubljana: Fakulteta za družbene vede.
- Britovšek, J. (2017). *Zasebna obveščevalna dejavnost v Republiki Sloveniji Teoretični, pravni in praktični vidiki* (Doktorska disertacija) [Private intelligence in the Republic of Slovenia A theoretical, legal and practical perspectives (Doctoral disseration)]. Ljubljana: Fakulteta za varnostne vede.
- Britovšek, J., Tičar, B., & Sotlar, A. (2017). Private intelligence in the Republic of Slovenia: Theoretical, legal, and practical aspects. *Security Journal*, 31(2), 410–427.
- Calof, J. L., & Wright, S. (2008). Competitive intelligence: A practitioner, academic and inter-disciplinary perspective. *European Journal of Marketing*, 42(7/8), 717–730.
- Competitive Intelligence Foundation. (2006). Competitive intelligence: A competitive intelligence foundation research report, 2005–2006. *Review of Innovation and Competitiveness*, 1(1), 25–44.
- Črnčec, D. (2008). *Obveščevalna dejavnost v javnem in zasebnem sektorju (Gospodarska vs. konkurenčna obveščevalna dejavnost)* (Doktorska disertacija) [Intelligence in the public and private sector (Business vs. competitive intelligence (Doctoral disseration)]. Ljubljana: Fakulteta za družbene vede.
- Cuijpers, C. M. K. C. (2013). Legal aspects of open source intelligence: Results of the VIRTUOSO project. *Computer Law and Security Review*, 29(3), 642–653.

- Dvojmoč, M. (2019). Integralna korporativna varnost [Integral corporate security]. *Varstvoslovje*, 19(3), 252–272.
- Dvoršak, A. (2003). Zbiranje relevantnih podatkov o proizvodnji, konkurenci in poslovanju: Industrial intelligence & competitive intelligence & business intelligence [Gathering relevant data on production, competition, and operations: Industrial intelligence & competitive intelligence & business intelligence]. In M. Pagon (Ed.), 4. Slovenski dnevi varstvoslovja (p. 144). Ljubljana: Visoka policijsko-varnostna šola.
- Eijkman, Q. A. M., & Weggemans, D. (2013). Open source intelligence and privacy dilemmas: Is it time to reassess state accountability? *Security and Human Rights*, 23(4), 287–296.
- Economic intelligence: A guide for beginners and practitioners. (2002). CETISME. Retrieved from https://www.madrimasd.org/uploads/CETISME-ETI-guide-english.pdf
- European Union, Your Europe. (2018). *Competition rules in the EU*. Retrieved from https://europa.eu/youreurope/business/selling-in-eu/competition-between-businesses/competition-rules-eu/index\_en.htm
- Galvin, R. W. (1997). Competitive intelligence at Motorola. *Competitive Intelligence Review*, 8(1), 3–6.
- Gjerek, B. (2009). *Taktika in metodika dela gospodarskih poizvedovalcev* (Specialistična naloga) [Work tactics and methodology of economic inquirers (Specialist thesis)]. Ljubljana: Fakulteta za varnostne vede.
- Gračanin, Š., Kalac, E., & Jovanović, D. (2015). Competitive intelligence: Importance and application in practice. *Review of Innovation and Competitiveness*, 1(1), 25–44.
- Havenga, J., & Botha, D. (2003). *Developing competitive intelligence in the knowledge-based organisation*. Retrieved from https://pdfs.semanticscholar.org/586a/8f6d 76390e17f75ec9bc8ebe6a28cd66ffef.pdf
- Hughes, S. (2005). Competitive intelligence as competitive advantage: The theoretical link between competitive intelligence, strategy and firm performance. *Journal of Competitive Intelligence and Management*, 3(2), 3–18.
- Kazenski zakonik (KZ-1) [Criminal Code]. (2008, 2009, 2011, 2012, 2015, 2016, 2017). *Uradni list RS*, (55/08, 66/08, 39/09, 91/11, 50/12, 54/15, 6/16, 38/16, 27/17).
- Liebowitz, J. (2006). Strategic intelligence: Business intelligence, competitive intelligence and knowledge management. Boca Raton: Auerbach Publications.
- Lönnqvist, A., & Pirttimäki, V. (2006). Measurement of business intelligence. *Information Systems Management*, 23(1), 32–40.
- Müller-Wille, B. (2004). For our eyes only? Shaping an intelligence community within EU (EU-ISS Occasional paper, no. 50). Paris: European Union Institute for Security Studies.
- Obligacijski zakonik (OZ) [Obligations Code]. (2001, 2004, 2007, 2016, 2018). *Uradni list RS*, (38/01, 32/04, 40/07, 64/16, 20/18).
- Potter, E. H. (1998). *Economic intelligence and national security*. Ottawa: Carleton University Press.
- Purg, A. (1995). Obveščevalne službe: Povezave med obveščevalnimi sistemi in državno suverenostjo v luči modela sodobnega iskanja obveščevalnega sistema Republike Slovenije [Intelligence services: Connections between intelligence systems and

- national sovereignty in light of the modern search model for an intelligence system of the Republic of Slovenia]. Ljubljana: Enotnost.
- Senčur Petek, D. (2016). Konkurenčna prepoved in konkurenčna klavzula [Prohibition on competition and non-compete clause]. *Anali PAZU HD*, 2(1), 27-43.
- Society of Competitive Intelligence Professionals (SCIP). (n. d.). *Integrated strate-gic competitive intelligence best practices*. Retrieved from https://www.scip.org/page/AssessmentGuidebook
- Šutanovac, L. (January 18, 2017). *Odgovor strokovnjaka: Poslovna skrivnost* [Expert's reply: Trade secret]. Ljubljana: Zavod mladi podjetnik. Retrieved from https://mladipodjetnik.si/novice-in-dogodki/novice/odgovor-strokovnjaka-poslovna-skrivnost
- TehnoCenter of the University of Maribor. (n. d.). *Trade secret*. Retrieved from http://www.intelektualna-lastnina.si/druge-pravice/poslovna-skrivnost
- Ulcej, D., Britovšek, J., & Sotlar, A. (2011). Obveščevalna dejavnost v gospodarstvu: Pojmovne opredelitve [Economic intelligence: Definitions]. In T. Pavšič Mrevlje (Ed.), 11. Slovenski dnevi varstvoslovja. Ljubljana: Fakulteta za varnostne vede. Retrieved from https://www.fvv.um.si/dv2010/zbornik/nacionalna varnost/britovsek ulcej sotlar.pdf
- Vrenko Peruško, I. (2004). Business intelligence: Oči in ušesa uspešnih podjetij [Business intelligence: Eyes and ears of successful enterprises]. Retrieved from http://www.gfk.si/4\_2\_lclank.php?cid=2010
- Williams, H. J., & Blum, I. (2018). Defining second generation open source intelligence (OSINT) for the defense enterprise. Santa Monica: RAND. Retrieved from https://www.rand.org/content/dam/rand/pubs/research\_reports/RR1900/ RR1964/RAND\_RR1964.pdf
- Zakon o detektivski dejavnosti (ZDD-1) [Private Detective Services Act]. (2011). *Uradni list RS*, (17/11).
- Zakon o gospodarskih družbah (ZGD-1) [Companies Act]. (2006, 2008, 2009, 2011, 2012, 2013, 2015, 2017, 2019). *Uradni list RS*, (42/06, 60/06, 10/08, 68/08, 42/09, 33/11, 91/11, 32/12, 57/12, 82/13, 55/15, 15/17, 22/19).
- Zakon o industrijski lastnini (ZIL-1) [Industrial Property Act]. (2001, 2002, 2004, 2006, 2013). *Uradni list RS*, (45/01, 96/02, 37/04, 20/06, 100/13).
- Zakon o poslovni skrivnosti (ZPosS) [Trade Secrets Act]. (2019). *Uradni list RS*, (22/19).
- Zakon o preprečevanju omejevanja konkurence [Prevention of Restriction of Competition Act]. (2008, 2009, 2011, 2012, 2014, 2015). *Uradni list RS*, (36/08, 40/09, 26/2011, 87/11, 57/12, 33/14, 76/15).
- Zakon o tajnih podatkih (ZTP) [Classified Information Act]. (2001, 2003, 2006, 2010, 2011). *Uradni list RS*, (87/01, 101/03, 28/06, 9/10, 60/11).
- Žaže, S. (2007). *Meje dovoljenosti gospodarskega poizvedovanja* (Specialistična naloga) [Boundaries of Permissibility of Economic Inquiry (Specialist thesis)]. Ljubljana: Faculty of Criminal Justice and Security.

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