PERCEPTION OF WEAPON AVAILABILITY AND NEW SOURCES FOR WEAPON KNOWLEDGE IN A CONVENIENT SAMPLE OF CROATIAN YOUTH

Marko Toth¹, Kristina Perišić¹, Franko Marušić¹

¹University of Applied Sciences Velika Gorica, Croatia

Abstract

This study aims to examine the perception of weapon availability and new sources for weapon knowledge of young people from Croatia. The last research about weapons (attitudes, availability, knowledge) in Croatia was conducted 12 years ago and there has been no significant research since so there is a serious gap of information in this field. 82 students (59% males and 41% females) in the age between 18 to 24 from the University of Applied Sciences Velika Gorica participated in this survey. The questionnaire included the introductory instructions and questions about sociodemographic data, questions about the weapons perception and knowledge. The results show that 88% of young people find it easy to get a weapon in the time interval of 2-7 days (30.9%). In the real environment, weapons are most easily reachable in specialized gun stores (82%), in the streets (72%) and schools (44.1%). Results of the online availability of weapons show that 68.3% of participants believe that it is possible to obtain weapons through online shopping and 61% through online forums. The largest source of knowledge about weapons is the Internet (71.5%). Almost half of the students perceive that firearms are available in schools and almost third that it is available in colleges. It seems that firearms are more accessible in the real physical environment than online but students learn more about guns through the Internet and media than in the physical environment. Our results may indicate possible weapons availability to young people in Croatia.

Keywords: youth, weapon availability, weapon carrying, deep web, violence

1. INTRODUCTION

Contemporary life is fulfilled with plenty of easily accessed information and contents which often negatively impacts the society and young people and children as the most vulnerable. Information about weapon availability and usage coming from social networks and deep web (often popularly called dark web) are particularly harmful because it can cause the perception and feeling of threat and consequently aggressive behavior. This can be followed by some tragic incidents and in that sort of way be a threat to public security.

Problems of weapon presence in schools and the everyday or recreational environment of young ones is seldomly explored in Croatia. Attitudes towards the weapons, the availability of weapons, and weapons-related knowledge and behavior were among the first to be investigated as part of the prevention program evaluation "Be responsible!: promotional activities and

education of youth for protection from mines and destructive explosive devices" (Kozarić-Kovačić, Grubišić-Ilić, Rutić Puž & Bakić-Tomić, 2000a; Kozarić-Kovačić, Grubišić-Ilić, Rutić Puž & Bakić-Tomić, 2000b). Only later in 2007. a much more elaborate approach on large sample of over 1000 adolescents in primary and secondary schools across Croatia was conducted (Blažević et al., 2011). For the purpose of this research the authors constructed a detailed questionnaire in order to epidemically investigate a set of variables related to weapon-carrying like weapon-carrying in different occasions and places, knowledge about weapons, attitudes towards the weapons and perception of weapon carrying and violence amongst adolescents. In addition, aggression scale (Orpinas & Frankovski, 2001) was included. To our knowledge up to this date there were no new research that has been conducted in last 12 years

which leaves a serious gap of information in this field. Some earlier researches in Croatian samples showed that 27% of eighth graders carry cold weapons (Vrselja, Sučić & Franc, 2009) and 12% high school students carry hidden cold weapons or firearms (Šakić, Franc & Mlačić, 2002).

As demonstrated experimentally a long time ago by Berkowitz and LaPage (1967), the presence of weapons increases the likelihood of manifested violence.

Nearly 1 Million (1997, as cited in Summers & Hoffman, 1998), American national survey on a large sample reported that 7% of college students carried firearm or knife in a monthlong period which leads to estimation of almost million weapon-carrying students. No matter how terrifying this number sound, considering the twelve-year period (1991-2003) altogether the violence and weapon carrying in the United States of America significantly declined through years (Brener, Lowry, Barrios, Simon, & Eaton, 2005). Recent researches about weapon-carrying in student population are not highly available. Some American studies on mostly male, highrisk teenager samples reveal the prevalence of 30.4% for weapon-carrying in general (Dijkstra, Lindenberg, Veenstra, Steglich, Isaacs, Card, & Hodges, 2010), 6.9% with and 7.5% without victimisation (Stayton, McVeigh, Olson, Perkins, & Kerker, 2011). Canadian research found that 7.2% of boys and 1.3% of girls aged 11-15 carries weapons (Kukaswadia, Craig, Janssen & Pickett, 2012). In Europe Finnish research showed that 9% of adolescents carried weapons in the last 12 month (Saukkonen, Laajasalo, Jokela, Kivivuori, Salmi, & Aronen, 2016). However, the severity of some particular events did not. In 1999 the public was appalled by the event now widely known as The shootings at Columbine High School (Scharrer, Weidman & Bissell, 2003) or by a more sinister name The Columbine High School massacre. In this, to put it mildly, unfortunate event two senior students armed with several firearm and improvised homemade explosive devices killed

twelve students and one teacher, injured another 21 person and finally ended their own life. Afterwards first major concerns about school violence and weapon availability that enables such tragic events occurred. The influence of this mournful event on youth like further violence, suicidal tendencies and ideation, weapon-carrying and usage has not been clearly rising except feelings of unsafety and school skipping, but it is considered to be underreported (Brener, Simon, Anderson, Barrios, & Small 2002). Many authors, dealing with the consequences of the event, adopted term The Columbine effect (e.g. Addington, 2003; Muchert & Peguuero, 2010; Muschert, Henry, Bracy, & Peguero, 2014).

However, it seems that the violence and weaponcarrying in US schools did not raised up after the year of The Columbine shootings (Brener, Lowry, Barrios, Simon, & Eaton, 2005).

It appears that firearm incidents do not increase with the growth of the campus population but are more dependent on the crime rate in the surrounding area. Smaller populations may have even more incidents than relatively larger ones but this data should be interpreted carefully because these are officially recorded incidents and a greater number of them may also mean more rigorous legal processing or incidents that occurred on campus not including students or faculty staff (Summers and Hoffman, 1998).

Media reporting gun-related violence in educational institutions often has an ambiguous role. Except evoking the violence in some youth and children by reporting the gun-related violence (mostly by newspaper), media can give an impression that educational institutions are extremely dangerous places and cause a general panic. But empirical data suggest that school violence is decreasing (Burns & Crawford, 1999; Perlus, Brooks-Russell, Wang, & Iannotti, 2014) and although some cases can present a security risk but they are far from extreme danger.

Except arms and other items that may be used as

a weapon, information sources about how to get, use or even make weapons has become even more available today and just few clicks away. Internet offers easily accessible information and sometimes we feel overwhelmed by the violence. A study by Bushman, Jamieson, Weitz & Romer (2013) revealed that gun-related violence in films has doubled since 1950 and might amplify aggression. Films are now easily accessible on cable or Internet and often include instructions how to use weapons among youth. In addition to movies, playing violent murdering games also available in the Web environment, is related to adolescents' auto-aggression antisocial behavior and (Bayraktar & Gün, 2006). Even though plenty of information is available in the surface web the more horrifying information can be retrieved in the Deep Web (also known as the Dark Web). The surface web refers to the content on the web that is available when browsing on regular browsers, while the Deep Web is containing information that is unavailable to the average internet user (He, Patel, Zhang, & Chang, 2007). The Deep Web is accessed through special web browsers that allow anonymity and make it difficult for users to track and locate. Due to its specificity, the Deep Web has become a site for many criminal acts such as selling drugs, organizing terrorist activities and even ordering killings (Madhavan, Ko, Kot, Ganapathy, Rasmussen, & Halevy, 2008). Terrorists in particular find it useful for moving their operations like communication, fundraising, storing information and online material on the Dark Web (Weimann, 2016).

No matter how accurate the data on gun-related violence is, it is obvious that it exists and even some meta-analyses clearly confirm that weapon-carrying behavior is related to violence (Van Geel, Vedder, & Tanilon, 2014; Valdebenito, Ttofi, Eisner, & Gaffney, 2017).

Recent daily press titles in Croatia testify that violence is still present and that also involves use of different objects as a means of injuring others (e.g. "The horror in Zadar school: A student

branded the letter U to a classmate ...", Jutarnji.hr, 2019, February 2019). Thus, it is hard to believe that violence is not a problem anymore and that violent gun incidents involving young people as victims and/or perpetrators no longer exists. Since the perception of the weapon availability among young people in Croatia was seldomly explored in a last decade or more in Croatia, this research has been conducted because of the information gap in this area.

Therefore, this research aimed to examine the perception of the weapon availability and knowledge about weapons in a convenient sample of young people from Croatia.

METHOD

2.1. PARTICIPANTS

The survey involved 82 students of the University of Applied Sciences Velika Gorica from three different study programs (Motor Vehicle Maintenance, Optometry and Management in Crisis Situations). The participants of age from 18 to 24 were 59% males and 41% females. The age in average was M = 20.3 (SD = 1.6) and most of them (39%) were 19 years old. The majority (55%) finished high school in Zagreb or in Zagreb County (16%). 55% of participants estimate their financial situation as good and 31% as average. Detailed characteristics of the sample can be seen in Table 1.

Table 1. Socio-demographics of the Participants as a Percentage of the Sample (N=82)

Charachteristic	n	%
Age M=20.3, SD=1.6		
18	2	2
19	32	39
20	17	21
21	14	17
22	8	10
23	3	4
24	6	7
Gender		
Female	48	59
Male	34	41
County of school attendance		
City of Zagreb	46	55
Zagreb County	12	16
Brodsko-posavska County	4	5
Sisačko-moslavačka County	4	5
Zadarska County	3	4
Other	13	15
Financial situation		
Very bad	1	1
Bad	4	5
Average	25	31
Good	45	55
Very Good	7	8

2.3. INSTRUMENTS

The applied questionnaire consisted of the introductory instructions and questions about sociodemographic data as showed in Table 1., then followed by the questions about the weapons perception and knowledge. This part of the questionnaire was first designed for the purposes of the project Availability of Weapons and Weapon-carrying in Adolescents of Croatia (Blažević et al., 2011). For the purposes of this research the questionnaire was adapted by adding a few questions about the availability of the information about weapons on the internet and according to age of the participants since the original questionnaire was designed for the minors.

Perception Weapons *Availability* The Questionnaire (PWAQ) is consisted of 9-items Weapon Availability Perception Index (WAPI) scale and additional questions. The possible answers on every WAPI item are Yes or No. Each confirmative answer is appointed with 1 point. The cumulative score of the scale ranges from 0-9, with a higher score indicating that the participant perceives the weapons more available. The obtained Cronbach's α coefficient of internal consistency on this sample is .78 and indicates good scale reliability. Some of the questions are I could easily purchase some cold weapon if I wanted to, I could easily purchase some firearm if I wanted to, I know how to easily get to some firearm, Firearms can be easily accessed illegally, I think that weapons are available to *minors*. All items are listed in Table 2.

As an additional measure of weapon availability, the participants were asked about the time interval within which they could acquire a firearm. They could choose between five possible answers: 1 - I cannot get a firearm, 2 - I cannot assess, 3 - Within few hours, 4 - Within one day, 5 - Within 2-7 days and 6 - In more than 7 days.

In the end, they were specifically asked about the social context where the firearm could be purchased (e.g. Internet web-shops, Silk Road website, university, at places I go out, via newspaper ads). For every social context four possible answers were offered: 1 - not possible, 2 – possible, but not to me, 3 - possible for me, 4 -I do not know or unknown term. All items are listed in Table 4.

The Weapons Knowledge Questionnaire (WKQ) consists of 12 items of various locations or contexts in which information about weapons can be obtained (e.g. from parents/caregivers, in school, on television, on social networks, deep web). Participants estimate for each item how much they have learned about the weapon on particularly way: 1 - none, 2 - little, 3 - much, 4 - very much. All items are listed in Table 6. Ultimately, each participant is asked to rate their own weapon

knowledge on a scale of 1 (insufficient) to 5 (excellent).

2.3. PROCEDURE

Data was collected in the paper-pencil survey during the class through the March of 2019. Participants were first informed about the purpose of the survey and conditions of the participation and asked to participate voluntary. The anonymous participation and data protection policy was clearly stated in oral and written instructions. The participants were informed about the contact for any follow-up inquiry regarding the research or results. The completion of the questionnaire in average took 15 minutes. All present students in the class were allowed to participate although the target group was young people aged 18 to 24. Older students' surveys were not taken into account. After entering the database, all printed questionnaires were destroyed.

2.4. DATA ANALYSIS

Data analyses were conducted with Statistical Package for the Social Sciences, version 20.0 (SPSS Inc., Chicago, IL). First, all data was coded and entered in SPSS 20.0 database. For all measures frequencies and percentages were observed and presented in tables. Total composite score and internal consistency for WAPI was calculated. In addition, means and standard deviations for WAPI and age were computed.

3. RESULTS AND DISCUSSION

According to the items of the *Perception of Weapons Availability Scale (PWAS)* presented in Table 2. results show that 88% of young people find it easy to get any weapon and what is more concerning, 35% find it easy to get a firearm legally an almost double (67%) illegally. Although the percentage of affirmative answers to the question "I could easily purchase some cold weapon if I wanted to." is very high (84%) it is anticipated because all the participants are adults and what could be defined as cold weapon, like kitchen knife, could be easily purchased in general stores

even to minors. However, even the recognition of the everyday tools as a weapon might be an indicator of high awareness of weapon availability. Nevertheless, it is more to be worried about the high percentages of participants who claim that firearms can be easily accessed both legally and illegally. In addition, almost half thinks that they could easily acquire some firearm by the affordable price. From presented results we can conclude that perception of this sample is that firearms are highly accessible and that there are enough simple and quick ways to acquire guns illegally. Although obtained on small sample this result is astonishing because of the existence of an elaborated National strategy and action plan for small and light weapon control (Nacionalna strategija i akcijski plan za kontrolu malog i lakog oružja, 2009) and very strict Croatian Law on the Acquisition and Possession of Weapons for Citizens (Zakon o nabavi i posjedovanju oružja građana, 2018), and yet firearm are still perceived as highly available. According to this law for citizens it is illegal to purchase, possess, hold or carry any A categorized weapon (among other including automatic, semiautomatic, police or army firearm, explosives or any hidden weapon at all). B categorized can be acquired but with special permit that requires at least age of 21 years1, proper cause (e.g. sports), weapon-handling exam, conditions for safe holding, not to be involved in any felony or violent misdemeanor and a minimal health² capability requirements. However, because of compliance of this law with EU Directive 2017/853 (Control of the acquisition and possession of weapons, 2017) the responsibility for reporting changes in the health status of weapon holder to the police is transferred to family doctors and it is no longer required to undergo 5-year periodic medical examinations for medical fitness to weapons possession it is a possible step back in the gun control.

The presence of weapons in the environment

^{1 18} if the person is with the police, army, shooting sport organizations, hunting society

² both physically and mentally

increases the chance of using a weapon and can be a trigger for aggressive behavior (Berkowitz & LePage, 1967). Given the high percentages obtained in this study, there is a chance that a certain number of participants possess weapons, which can then lead to aforementioned weapon effect. But because this data only relates to participants' perceptions of the availability of weapons, we cannot confirm that they are actually in possession of weapon. Comparing data with a study conducted 12 years ago (Blažević et al., 2011), we can see that the results on almost all particles remained at very similar values or in

some cases decreased, which may lead us to conclude that weapons are perceived to be a bit less available today. Only the percentage of confirmative answers to the question "Firearms can be easily reachable legally." has increased, which is not surprising given the slightly different present sample of participants. Since many of the participants are of legal age and may legally own a firearm this must have inflicted the results at some level. The average WAPI score was 3.84 (SD = 2.5, min = 0, max = 9) so we can conclude that the participants in this research find the weapon available at least in some extent.

Table 2: Participants (N=82) responses on Perception of Weapons Availability Questionnaire Scale items. The percentage of affirmative answers are displayed.

Item	N	%
It is easy to get weapons today.	71	88
I could easily purchase some cold weapon if I wanted to.	67	84
I could easily purchase some firearm if I wanted to.	40	49
I know how to easily get to some firearm.	34	42
I can easily acquire some weapon at affordable price.	39	48
Firearms can be easily accessed legally.	29	35
Firearms can be easily accessed illegally.	54	67
In special occasions (e.g. Christmas, New Year or other celebrations) firearms are more available to me than usual.	29	35
I think that weapons are available to minors.	55	67

Asked about the time interval within which it was possible for them to obtain firearm, the largest number of participants indicated that they could not assess (33.3 %) or that they need 2-7 days (30.9%) and 8.6% of participants perceive that they can obtain a firearm within a few hours (Table 3). Altogether the percentage of the participants that perceived to be able to obtain a weapon within a week is 45.7% which means almost half of the sample. Compared to the previous Croatian data which showed that 39% of participants can acquire weapons within a week (Blažević et al., 2011), the present percentage is somewhat larger. This high percentage of short time perceived for obtaining the firearm indicates the possible widespread availability of firearms, at least according to the perception of the participants.

Table 3: Perceived time interval within which is possible to obtain firearm. Percentage and frequencies of affirmative answers (N=82).

Item	N	%
I cannot get a firearm.	13	16
I cannot assess	27	33,3
Within few hours	7	8,6
Within one day	5	6,2
Within 2-7 days	25	30,9
In more than 7 days	4	4,9

Table 4 shows the results of the perceived firearm availability defined through the possibility to personally obtain firearm in real (physical) or through virtual (Internet) environment. In the real

environment, weapons are most easily reachable in specialized gun stores (82%), in the streets (72%) and in schools (44.1%). The data obtained in an earlier survey on a Croatian sample of Blažević et al. (2011) was a bit different: the easiest way for adolescents to obtain firearms was also in specialized gun stores (93%) and in the streets (90%) but also through newspaper ads (91%) and it is evident that overall percentages were larger. However, it is notable that the school today reached top three places in which is easy to get guns. Newspaper ads have obviously lost the popularity over the last 12 years what is reasonable because of dominance of much cheaper and accessible Internet media. Thus, it is likely that newspaper advertising has largely shifted to the Internet. New information, which was not examined before 12 years, is that 30.5% of participants believe that weapons can be also purchased at colleges.

Sheley & Wright (1993) stated that in high crime areas, 12% of young people are constantly carrying weapons that (according to answers) are the easiest to borrow from friends or relatives or to purchase in the street. Similarly, in our research, the street proved to be one of the places where participants perceive the weapons highly available. The United States studies shows that students held or carried weapons to high schools and college campuses (Presley, Meilman, & Cashin, 1997; Summers & Hoffman, 1998; Miller, Hemenway & Wechsler, 2002). Since we do not have information on whether young people in Croatia carry weapons, we cannot compare them to these results but can only conclude that Croatian students perceive it as accessible even on campus. For the further research this problem should be addressed more boldly and the information about the incidence and the reasons for firearm possession should be gathered in order to detect risk factors.

According to the studies that examine reasons for weapon-carrying among youth (e.g. Melde, Esbensen, & Taylor, 2009; Lowry, Powell, Kann, Collins, & Kolbe, 1998; Simon, Dent, & Sussman, 1997) it is easy to assume that probably the main

reasons for weapon-carrying are victimization vulnerability, insecurity and involvement in physical violence. Summers & Hoffman (1998) discuss the perception of fear as the crucial reason of weapon-carrying on campus and, additionally, the associations with the respect and status gain. It is obvious that fear dominantly emerges as a common factor. When fear is considered from the transactional model of stress (Lazarus & Folkman, 1984) point of view it might be rather a consequence or a symptom than a cause of weapon-carrying behavior. More precisely, our own perception of the threat based on our cognitive appraisal that our environment is violent and dangerous is the cause of stress that is dominated by the feeling of fear. Therefore, we are coping with this stress by trying to raise our feeling of security by carrying a weapon. That consequently leads our appraisal of violent threats to the perception that we are not helpless as we can defend ourselves with a weapon. Hopefully, this kind of coping would stay on dealing with our emotions and not with the problem because this would mean another violent reaction to the source of the violence and more violence. Unfortunately, the weapons effect teaches us exactly the opposite.

It is worthy to remark that the weapons market in the United states and gun control laws are much more liberal than in Croatia, so real availability of firearms for our sample is expected to be lower. A high percentage of perceived opportunities to purchase weapons in specialized gun stores is not surprising, given that the numerous participants in our sample meet legal conditions of minimal age to obtain the permit for buying a firearm.

As the availability of weapons online is concerned, 68.3% of participants believe that it is possible to obtain weapons through online shopping, 61% through online forums and 65.8% via the Deep Web, while the Silk Road online black market site is unknown to most of the participants. Surprisingly for the participants it seems easier to obtain firearms in a physical environment than through the Internet.

Table 4: Perception of firearm accessibility through possibility of obtaining via virtual (Internet) and real (physical) environment in percentages and frequencies of affirmative answers (N=82)

	Possib	le to me	Possible, but not to me		Not possible		I do not know/ Unknown term	
Item	n	%	N	%	n	%	n	%
Internet web-shops	34	41.5	22	26.8	10	12.2	15	18.3
Silk Road website	13	15.9	12	14.6	8	9.8	46	56.1
Internet forums	26	31.7	24	29.3	10	12.2	22	26.8
Deep/dark web	31	37.8	23	28	6	7.3	22	26.8
In school	3	8.7	29	35.4	40	48.4	9	11
On university	4	4.9	21	25.6	43	52.4	13	15.9
At home	7	8.5	13	15.9	53	64.6	9	11
At places I go out	16	19.5	15	18.3	32	39	19	23.2
Via newspaper ads	20	24.4	13	15.9	28	34.1	20	24.4
In the streets	29	35.4	30	36.6	11	13.4	11	13.4
In specialized gun stores	32	39	36	43.9	6	7.3	7	8.5

In a self-assessment of their own weapons knowledge, students mostly (33.3%) estimate that their gun knowledge is insufficient, while a quarter of them (25.9%) thinks that it is good and another quarter that it is sufficient (24.7%). Only 16.1% of students think that their knowledge of guns is very good or excellent. It is difficult to say if students in our sample underestimated their weapon knowledge. Considering the wartime past and the presence of weapons in various media it is more likely that they have learned enough about weapons during their lifetime and this information is under-reported. On the other hand, there are laws for weapon control, and for most of the young people in Croatia, weapons obtained through legal means are still not usual.

Table 5: Perceived knowledge about weapons

Item	n	%
Insufficiently	27	33.3
Enough	20	24.7
Good	21	25.9
Very good	8	9.9
Excellent	5	6.2

Quite interesting was to observe if the sources of knowledge about weapons have changed as young people learn more about weapons on the Internet than in the physical environment. The results in Table 5. show that the Internet is the largest source of knowledge about weapons where 71.5% of participants learned a lot about weapons. More than half (57.6%) learned about weapons on internet video platforms (YouTube and the like), 38.7% on internet educational sites (Wikipedia, Wikihow, etc.), and 35.3% on social networks. Much less (14.6%) of the students learn about weapons in the Dark Web what is not so surprising given that reaching these Internet places requires additional knowledge and skills. Using the dark web and educational sites for retrieving information about weapons may indicate deliberate intention because it is less likely to run into them by regular surfing. On the other hand, learning about weapons on video platforms, social networks or portals may involve accidental contact with this information, which in turn may be indication about the widespread availability of weapon information and violent contents in the media.

The results show that traditional media is no longer a source of knowledge about weapons except television where more than half of the students (56.1%) learned about weapons. Most of information probably comes from series and movies. Bushman, Jamieson, Weitz & Romer (2013) support this hypothesis as they found that gun-related violence in films has significantly increased and often include instructions for weapon use. Also, they expressed the concern that films may be strengthening the weapons effect and that the increase of aggressive behavior among youth could be expected.

30.5% of students said that they have learned about guns from newspapers, but it is more likely that participants thought of online editions of the newspapers. The radio is not obviously not a frequent source of gun knowledge, only 8.5 says they learned about guns through the radio.

The physical environment where young people circulate and the close people that they are regularly contact in are less frequently and resourceful for weapons information. Much less than most of the media and especially Internet. A quarter of students (25.3%) learns information from friends, 18.3% from parents or guardians, 13.6% at places they go out and 11% at school.

It is very clear that Internet and television are by far dominant source of information about weapons, but it is also reasonable to assume that some of information left unreported due to socially appropriate answers. Browsing the Internet or watching television program, no matter of acceptability of the contents, in most cases is not illegal activity but coming in direct contact with weapons personally or by close proxy might be. Therefore, some of this data might be left out.

	Not at all		Little		Much		Very much	
Item	n	%	n	%	n	%	n	%
From parents/caregivers	39	47.6	28	34.1	12	14.6	3	3.7
From friends	31	39.2	28	35.4	15	19.0	5	6.3
In school	34	41.5	39	47.6	8	9.8	1	1.2
In the places where I go out	50	61.7	20	24.7	8	9.9	3	3.7
In newspapers	23	28.0	33	40.2	21	25.6	4	4.9
On television	10	12.2	25	30.5	29	35.4	17	20.7
On the radio	54	65.9	21	25.6	5	6.1	2	2.4
On the Internet	7	8.5	16	19.5	25	30.5	34	41.5
On social networks	30	36.6	23	28.0	23	28.0	6	7.3
······································		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•	•	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •

20

23

8

25.0

28.7

9.8

27

23

7

Table 6: Places where young people learn about guns

4. RESEARCH LIMITATIONS

On video hosting websites

On educational websites

Deep web

This research has some limitations. First, we used the convenient sample of students which has some specific structural characteristics. Although most of the sample went to high school

14

26

62

17.5

32.5

75.6

in Zagreb it is more likely that they live in the area of Velika Gorica which can be rather considered as suburban sample. Also, this area has strong hunting tradition which might affect the results.

33.8

28.7

8.5

19

8

5

23.8

10.0

6.1

Another specific feature of this sample is that it is partly consisted of the students of Management in Crisis Situations which could be more familiar with the weapons through the curriculum. Having this in mind these results should be considered carefully before any conclusions about the entire population of young people in Croatia would be drawn. Also, for these conclusions much larger sample would be desirable.

Given that the topic of this research is rather safety sensitive and delicate it is strongly possible that participants provided socially desirable responses and thus damaged the validity of the data. As observed on the results some of questions used in this survey turned not to be clear enough (e.g., information about weapons from the newspapers are more likely to be referred on online editions of newspapers.

Most of the researches of this subject were conducted in the United States which have different historical, cultural and legislative background compared to Europe so this data is not completely comparable. This survey was carefully designed having in mind the possible social acceptable answers and sensitivity of the subject and overall participants' well-being, but because of this it also fails to directly ask the participants if any of them actually carried or used weapon and thus provide the completely comparable and precise data. Nevertheless, this research has again actualized the problem of weapon-carrying in Croatia or the shortage of adequate, or even any, research of this phenomena.

5. CONCLUSION

Almost half of the students perceives that firearms are available in schools and almost third that it is available in colleges. Interestingly, the obtaining of firearms seems to be more accessible in the real physical environment than online. In the other hand, they learn more about guns through the Internet and media than in the physical environment.

Students perceive guns quite easily accessible and slightly less accessible compared to research 12 years ago, which warns us for the possible high availability of weapons and the potential security problem in educational institutions. However, in order to confirm these suspicions further and detailed research is needed. No doubt, addressing this issue needs to be re-emphasized and re-updated.

For the average Internet user, the usually inaccessible parts of the Internet remain so for majority of participants, and concern about the availability of the gun information through these channels is not too necessary compared to the abundance of information present on the regularly available Internet. The World Wide Web is, unfortunately, abundant source of information about weapons, and it would be interesting to investigate how much young people and citizens in general search for weapons-related content and how does this relate to violent incidents. While in the United Sates gun-related violence statistics are on the rise (Gun violence archive, May 17, 2019.) the weapon-carrying phenomena is emerging also in the other countries like Israel (Khoury-Kassabri, Astor, & Benbenishty, 2007), Switzerland Kuntsche & Klingemann, 2004) or Finland (Saukkonen, Laajasalo, Jokela, Kivivuori, Salmi, & Aronen, 2016). Having that in mind together with the fact that our results may indicate possible weapons availability to young people is enough to be worried.

REFERENCES

- Addington, L. A. (2003). Students' fear after Columbine: Findings from a randomized experiment. *Journal of Quantitative Criminology*, 19(4), 367-387.
- Bayraktar, F., & Gün, Z. (2006). Incidence and correlates of Internet usage among adolescents in North Cyprus. *CyberPsychology & Behavior*, 10(2), 191-197.
- Berkowitz, L., & LePage, A. (1967). Weapons as aggression-eliciting stimuli. Journal of Personality and Social Psychology, 7(2p1), 202.
- Blažević, M., Celjak, A., **Čular**, I., Lugomer-Armano, G., Perišić, K., Sudar, M. i Toth, M. (2011) *Percepcija raširenosti i dostupnosti oružja kod adolescenata u Hrvatskoj*. U: I.Toth (Ur.), Zbornik radova IV. Međunarodna konferencija "Dani kriznog upravljanja", (str. 742 -775), Velika Gorica: Veleučilište Velika Gorica s pravom javnosti
- Brener, N. D., Simon, T. R., Anderson, M., Barrios, L. C., & Small, M. L. (2002). Effect of the incident at Columbine on students' violence-and suicide-related behaviors. *American journal of preventive medicine*, 22(3), 146-150.
- Brener, N., Lowry, R., Barrios, L., Simon, T., & Eaton, D. (2005). Violence-related behaviors among high school students--United States, 1991-2003. *Journal of School Health*, *75*(3), 81-86.
- Burns, R., & Crawford, C. (1999). School shootings, the media, and public fear: Ingredients for a moral panic. *Crime, Law and Social Change*, 32(2), 147-168.
- Bushman, B. J., Jamieson, P. E., Weitz, I., & Romer, D. (2013). Gun violence trends in movies. *Pediatrics*, *132*(6), 1014-1018.
- Control of the acquisition and possession of weapons 2017, Official Journal of the European Union (EU) Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017L0853&from=HR
- Dijkstra, J. K., Lindenberg, S., Veenstra, R., Steglich, C., Isaacs, J., Card, N. A., &
- Hodges, E. V. (2010). Influence and selection processes in weapon carrying during adolescence: The roles of status, aggression, and vulnerability. *Criminology*, 48(1), 187-220.
- Gun Violence Archive. (May 17, 2019.). Retrieved May 17, 2019, from https://www.gunviolencearchive.org/past-tolls.
- He, B., Patel, M., Zhang, Z., & Chang, K. C. C. (2007). Accessing the deep web: A survey. *Communications of the ACM*, 50(5), 94-101.
- In A.M., Hoffman, J.H. Schuh, & R.H. Fenske (Eds),

- Violence on campus, (p. 53-67). Gaithersburg, Maryland: Jones & Bartlett Learning
- Jutarnji.hr. (2019, February 7). Strava u Zadarskoj školi: Učenik na nastavi kolegici žigosao slovo U na ruku i rekao joj: 'Sad se možeš hvaliti da si ustaša'. Retrieved May 17, 2019, from https://www.jutarnji.hr/vijesti/hrvatska/strava-u-zadarskoj-skoli-ucenik-na-nastavi-kolegici-zigosao-slovo-u-na-ruku-i-rekao-joj-sad-se-mozes-hvaliti-da-si-ustasa/8353328/.
- Khoury-Kassabri, M., Astor, R. A., & Benbenishty, R. (2007). Weapon carrying in Israeli schools: the contribution of individual and school factors. *Health Education & Behavior*, 34(3), 453-470.
 - ć čć ć ć
 ć ć
 ć škola
- Kozarić-Kovačić, D., Grubišić-Ilić, M., Rutić-Puž, L., & Bakić-Tomić, L. (2000). Be responsibile!: promotional activities and education of youth for protection from mines and destructive explosive devices: evaluation-phase 1. Zagreb: Ministarstvo unutarnjih poslova i Policijska akademija
- Kukaswadia, A., Craig, W., Janssen, I., & Pickett, W. (2012). Bullying as a mediator of
- relationships between adiposity status and weapon carrying. *International journal of public health*, *57*(3), 505-512.
- Kuntsche, E. N., & Klingemann, H. K. H. (2004). Weapon-carrying at Swiss schools? A gender-specific typology in context of victim and offender related violence. *Journal of Adolescence*, *27*(4), 381-393.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.
- Lowry, R., Powell, K. E., Kann, L., Collins, J. L., & Kolbe, L. J. (1998). Weapon-carrying, physical fighting, and fight-related injury among US adolescents. *American journal of preventive medicine*, 14(2), 122-129.
- Madhavan, J., Ko, D., Kot, Ł., Ganapathy, V., Rasmussen, A., & Halevy, A. (2008). Google's deep web crawl. *Proceedings of the VLDB Endowment*, *1*(2), 1241-1252.
- Melde, C., Esbensen, F. A., & Taylor, T. J. (2009). 'May piece be with you': A typological examination of the fear and victimization hypothesis of adolescent weapon carrying. *Justice Quarterly*, 26(2), 348-376.
- Miller, M., Hemenway, D., & Wechsler, H. (2002). Guns and gun threats at college. *Journal of American College Health*, *51*(2), 57-65.

- Muschert, G. W., & Peguero, A. A. (2010). The Columbine effect and school antiviolence policy. In *New approaches to social problems treatment* (pp. 117-148). Emerald Group Publishing Limited.
- Muschert, G. W., Henry, S., Bracy, N. L., & Peguero, A. A. (Eds.). (2014). *Responding to school violence: Confronting the Columbine effect*. Boulder, CO: Lynne Rienner Publishers.
- Nacionalna strategija i akcijski plan za kontrolu malog i lakog oružja 2009, NN 113 (Cro). Retrieved from: http://www.propisi.hr/print.php?id=9632
- Orpinas, P. & Frankowski, R. (2001). Scales and
 Assessments. U: Dahlberg, L L., Toal, S.B., Swahn,
 M.H. & Behrens, C.B. (Ur.), Measuring ViolenceRelated Attitudes, Behaviors and Inluences Among
 Youths: A Compendium of Assessment Tools, Second
 Edition, (str. 174). Atlanta: National Center for Injury
 Prevention and Control of the Centers for Disease
 Control and Prevention.
- Perlus, J. G., Brooks-Russell, A., Wang, J., & Iannotti, R. J. (2014). Trends in bullying, physical fighting, and weapon carrying among 6th-through 10th-grade students from 1998 to 2010: Findings from a national study. *American journal of public health*, 104(6), 1100-1106.
- Presley, C. A., Meilman, P. W., & Cashin, J. R. (1997). Weapon carrying and substance abuse among college students. *Journal of American College Health*, 46(1), 3-8.
- Saukkonen, S., Laajasalo, T., Jokela, M., Kivivuori, J., Salmi, V., & Aronen, E. T. (2016). Weapon carrying and psychopathic-like features in a population-based sample of Finnish adolescents. *European child & adolescent psychiatry*, 25(2), 183-191.
- Scharrer, E., Weidman, L. M., & Bissell, K. L. (2003). Pointing the finger of blame: News media coverage of popular-culture culpability. *Journalism & communication monographs*, 5(2), 48-98.
- Sheley, J. F., & Wright, J. D. (1993). Gun acquisition and

- possession in selected juvenile samples. US Department of Justice, Office of Justice Programs, National Institute of Justice.
- Simon, T. R., Dent, C. W., & Sussman, S. (1997).

 Vulnerability to victimization, concurrent problem behaviors, and peer influence as predictors of inschool weapon carrying among high school students. *Violence and Victims*, 12(3), 277.
- Stayton, C., McVeigh, K. H., Olson, E. C., Perkins, K., & Kerker, B. D. (2011).
- Victimization and health risk factors among weaponcarrying youth. *American journal of health behavior*, 35(6), 654-663.
- Summers, R. W., & Hoffman, A. M. (1998). Weapon carrying on campus.
- Šakić, V., Franc, R., & Mlačić, B. (2002). Samoiskazana sklonost adolescenata
- socijalnim devijacijama i antisocijalnim ponašanjima. *Društvena istraživanja: časopis za opća društvena pitanja*, 11(2-3 (58-59)), 265-289.
- Valdebenito, S., Ttofi, M. M., Eisner, M., & Gaffney, H. (2017). Weapon carrying in and out of school among pure bullies, pure victims and bully-victims: A systematic review and meta-analysis of cross-sectional and longitudinal studies. *Aggression and violent behavior*, 33, 62-77.
- Van Geel, M., Vedder, P., & Tanilon, J. (2014). Bullying and weapon carrying: A meta-analysis. *JAMA pediatrics*, 168(8), 714-720.
- Vrselja, I., Sučić, I., & Franc, R. (2009). Rizična i antisocijalna ponašanja mlađih
- adolescenata i privrženost školi. *Društvena istraživanja: časopis za opća društvena pitanja*, 18(4-5), 739-762.
- Weimann, G. (2016). Terrorist migration to the dark web. *Perspectives on Terrorism*, 10(3).
- Zakon o nabavi i posjedovanju oružja građana 2018, NN 94 (Cro). Retrieved from https://www.zakon.hr/z/1161/ Zakon-o-nabavi-i-posjedovanju-oru%C5%BEjagra%C4%91ana

