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Juvenile Crime in the 21st Century: A Really Escalating Problem or Just a Media Sensation? The Case of Croatia

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Purpose:

The main goal of the paper is to analyse dynamics of juvenile crime and to identify long-term tendencies in the development of this negative social phenomenon in Croatia in this century.

Design/Methods/Approach:

Based on official police statistics, the analysis of the dynamics and the average rate of change are used to reveal and compare trends in reported overall, violent, and juvenile property crime in Croatia between 2000 and 2013. Model of a linear trend is used to make a prediction of future short-time trends.

Findings:

Though the total number of reported juvenile crime is stable or even slightly declining over the observed period, there are exceptional increases or declines in certain years and in certain offences, which can create the wrong impression about alarming changes. It especially applies to the oscillations of the number of reported juvenile homicide and rape, because of small absolute numbers. Substantial and significant fluctuations during the observed period, are found in reported rates for robbery and theft: there is a decrease in reported theft and increase in reported robbery.

Originality/Value:

In Croatia, but also in other post-socialist countries in Central Eastern Europe, there are general beliefs of the dramatic increase in juvenile crime rates since late 1990s. Results of this study reveal how such cursory review obscures some long-term and significant changes in juvenile crime, which are indicative when speaking about the juvenile crime under conditions of intensive social change.

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Keywords: juvenile, overall crime, violent crime, property crime, Croatia, trends

Mladoletniška kriminaliteta v 21. stoletju: resnično naraščajoč ali zgolj medijsko izpostavljen problem – študija primera Hrvaške

Namen prispevka:

Namen prispevka je analizirati dinamiko mladoletniške kriminalitete in identificirati dolgoročne trende v razvoju tega nezaželenega družbenega pojava na območju Hrvaške v tem stoletju.

Metode:

Analiza je bila opravljena s pomočjo uporabe uradne statistike hrvaške policije, kjer je analizirana dinamika in povprečje pojavnosti vseh kaznivih dejanj, kaznivih dejanj z elementi nasilja in premoženjskih kaznivih dejanj, ki so jih bili v obdobju od 2000 do 2013 na območju Hrvaške osumljeni mladoletniki. Za predvidevanje pojavnosti analiziranih kaznivih dejanj v bližnji prihodnosti je bila uporabljena metoda linearnih trendov.

Ugotovitve:

Število analiziranih kaznivih dejanj je v opazovanem obdobju stabilno, včasih celo upada, pri tem pa lahko zaznamo določene poraste ali upade pri specifičnih oblikah kaznivih dejanj in v krajšem časovnem obdobju. Slednje nas lahko vodi k napačnim zaključkom ali pa brez potrebe vzbuja alarmne odzive. To še posebej velja za nihanja pojavnosti kaznivih dejanj umora in posilstva, ki so jih bili osumljeni mladoletniki, še posebej zato, ker govorimo o majhni številki pojavnosti teh kaznivih dejanj. Statistično pomembna odstopanja so bila zaznana le pri kaznivih dejanjih ropov in tatvin; ugotovili smo pomemben porast prijavljenih kaznivih dejanj ropa in upad kaznivih dejanj tatvin.

Praktična uporabnost:

Na Hrvaškem, pa tudi v drugih postsocialističnih državah Srednje in Vzhodne Evrope, obstaja prepričanje o dramatičnem porastu mladoletniške kriminalitete v času po 1990. Rezultati te analize pokažejo, kako lahko takšna prepričanja spregledajo dolgoročne in pomembne spremembe na področju mladoletniške delinkvence, ki so pogojene in jih je mogoče pojasniti predvsem skozi prizmo družbenih sprememb.

UDK: 343.915(497.5)

Ključne besede: mladoletniki, kriminaliteta, nasilna kazniva dejanja, premoženjska kazniva dejanja, Hrvaška, trendi

1 INTRODUCTION

Is juvenile crime out of control? Not only does this issue fill the headlines of daily newspapers in an effort to attract more readers, but it is often found in professional and scientific publications. Some 16 years ago, Loose and Thomas (1998: 22) dramatically warned: "To those who regularly deal with youngsters involved in violence, it often feels as if an entire generation is hopelessly lost. The

frustration is heard in the voices of those who jail juveniles and those who treat their wounds." The results of comparative research and official crime statistics across Europe (Cajner Mraović, Butorac, & Kešetović, 2014; Enzmann & Podana, 2010; Killias, Lucia, Lamon, & Simonin, 2004; Sijerčić-Čolić, 2012; Steketee & Gruszczyńska, 2010) bring good news about declining juvenile crime rates overall in Europe since 2005. However, if you talk to people about crime, you do not hear about the results of relevant surveys or recent police statistics, but about concrete media reports on young people who commit brutal offences to gain material benefit or just to have fun. The problem is that nowadays such stories spread quickly and people easily lose a sense of the exact place where they occurred, so it is possible that somebody in Croatia in 2014, feels threatened by juvenile violence like somebody 10 or 15 years ago in the United States, "which has long had the dubious distinction of being the most violent and crime-ridden industrial nation in the world" (The Public Agenda, 1998: 17).

2 LITERATURE REVIEW

It can be said with some certainty that juvenile crime has increased in the second half of the twentieth century in all European countries except Denmark, The Netherlands, Norway, Scotland and Sweden (Estrada, 1999). Although all sources point to a massive increase in offending among juveniles, particularly in violent offences during the 1990s in most European countries (Killias et al., 2004), interest is especially great for juvenile crime in the post-socialist countries in Central and South-Eastern Europe because of the rapid social changes that they have had to cope with in that period. Sijerčić-Čolić (2012) even points out that changes in juvenile delinquency over the last three decades have put considerable pressure on transitional countries. The author analyses juvenile crime in seven post-socialist countries in South-Eastern Europe, with particular emphasis on four countries, which were established after the collapse of Yugoslavia: Bosnia and Herzegovina, Croatia, Serbia and Slovenia. The given data show interesting common trends in all observed countries that could be summarized as follows: over the last ten years of the twentieth century there are oscillating levels in juvenile crime characterised mainly by a sudden upsurge and then a more or less continuous increase in the number of reported juvenile offenders, while over the first decade of the twenty-first century there is an upward trend in officially recorded juvenile crimes continuing for five years, followed by a gradual but more or less constant decline. There are other authors (Asquith, 1998; Cajner Mraović & Stamatel, 2000), whose research lead to the same conclusions about the increase in juvenile crime that occurred in transitional countries in the nineties. It seems that our understanding of these trends is still insufficient, which leaves room for speculation and prevents constructive discussion of trends in this century. It also occurs that previous or now outdated estimates are still uncritically accepted, because they are impressive.

Those who argue that juvenile delinquency is a severe problem refer to a few main theses: young people are committing increasingly brutal offences and seem to feel no remorse for the harm they do to their victims; such acts of juvenile wanton violence are being perpetrated by increasingly younger offenders, not exclusively by boys but even girls, and by different types of cold weapons and even firearms. It is not difficult to agree with this argument, but one can also easily accept an entirely opposite approach based also on a few main theses: the problem of juvenile crime and particularly the problem of juvenile violence are exaggerated by media and politicians who both need to target something or someone to blame for all problems in society; young people are still far more likely to become the victims rather than perpetrators of crime; juveniles still predominantly commit crimes against property and other non-violent offences.

The correct solution to these dilemmas is not necessary just for the sake of "peace at home," but it is also important for the long-term future of the juvenile justice system. Should the juvenile justice system get tougher on juvenile offenders, particularly for violent crimes, has been a topic of much debate over the past two decades not just in Croatia but in many countries in the world. The answer to this question varies from absolute agreement to absolute disagreement, not only in the general but also in the professional public. Another problem is that the argument for getting tougher, as well as the argument against it, does not necessarily mean the same for different authors. This is because hidden behind this question is a series of controversies about what causes juvenile crime and juvenile violence in particular. Criminological, sociological, psychological and interdisciplinary research in the 20th and 21st century have revealed many different risk factors for juvenile criminal behaviour.

3 METHOD AND MATERIAL

There are three methods of measuring juvenile crime: through measurement of officially recorded crime in police, prosecution or court statistics, through self-reported delinquency surveys and victimisation surveys. This paper focuses on the analysis of juvenile crime trends in Croatia based on the data reported to and recorded by the police. Official crime statistics is often used in criminological research because it is the most accessible source of data on juvenile crime. Taking into account their general limitations resulting from citizens' reporting behaviour and the way various levels of the criminal justice system function, in this study only the data on reported juvenile offenders available from the police statistics are used. Reported juvenile offenders are juvenile perpetrators of criminal offences against whom legal proceedings based on the crime report have been concluded. The number of reported juveniles is much closer to the real state of juvenile crime than the number of accused or convicted minors because the rule of appropriate scope for discretion is to be allowed and even recommended at all stages of criminal proceedings and all levels of juvenile justice administration.

The use of survey data is also problematic because of limited samples, high costs and often inconsistent methodologies. Even the *International Crime Victimisation Survey (ICVS)* and the *International Self-Reported Delinquency Survey (ISRD)*, which both include the use of standardised survey questions, have methodological problems resulting from different sampling procedures: in some countries, national samples were used, while in other countries city samples were drawn. In the *ICVS*, respondents were asked whether they had been exposed to

the victimization of certain types of offenses over the last twelve months and the last five years. In the ISRD respondents were 13- to 16- year- old school children, who were asked whether they had committed any of the provided twelve offences over the last twelve months. Although it is understandable to expect a coincidence of the survey results with official data on juvenile crime, the results of ICVS and ISRD do not necessarily correlate with the official statistical data on juvenile crime. This fact is crucial in terms of current controversies and dilemmas about nature and scope of the juvenile crime. For instance, based on the results of the self-reported delinquency study conducted in six member states that joined the European Union in 2004 (Czech Republic, Estonia, Lithuania, Poland, Slovenia and Cyprus), Steketee and Gruszczyńska (2010) found a remarkable degree of similarity in juvenile crime patterns among post-socialist EU states which include a large discrepancy between the official criminal statistics in 2008 and the self-reported juvenile crime in the same year: juvenile crime tends to go unreported. This is a critical finding because it clarifies the origin of actual doubts about the extent and severity of juvenile crime: it is largely a part of the "dark figure" of crime, so it is not recorded, but it still exists as a problem in society. Analysing empirical studies on juvenile crime in seven post-socialist European countries, Sijerčić-Čolić (2012) comes to a quite similar conclusion: although the number of reported juveniles in the selected countries at the turn of the century showed an upward trend that was nowhere near to being as dramatic as the number of reported adults, juvenile offenders everywhere are given greater public concern, particularly the violent ones and those under the age of 14. Finally, comparing trends of juvenile violence between 2000 and 2006 in cities in the Czech Republic, Germany, Poland, Russia, and Slovenia, Enzmann and Podana (2010) also found some discrepancies between the official crime statistics and self-reported study data which better enlighten why people are still worried about juvenile violence although the increase in officially registered violent offender rates in the observed five transitional countries did not continue after 2000. An important fact is that data on self-reported violent behaviour in those countries reveal a drop in wanton violence in 2006 compared to 1999, but also an increase in instrumental violence in the same period.

In the paper, we did not use the survey data because they are still not available in Croatia. Last year, Croatia joined the *ISRD* for the first time, but the sample was not representative for Croatia and only the results for one of two participating cities are known.

The main goal of the paper is the analysis of the data readily available from the police statistics in Croatia in 2000–2013 period for overall juvenile crime, juvenile crime against life and limb, juvenile sexual crime, juvenile crime against property and juvenile drug-related crime, as well as for selected ten most common or most dangerous criminal offences: homicide, bodily injury, serious bodily injury, rape, theft, aggravated theft, robbery, property damage, violent behaviour, and attack on a public official.

4 RESULTS

In Table 1 and Figure 1 trends in overall juvenile crime, juvenile crime against life and limb, juvenile sexual crime, juvenile crime against property and juvenile drug-related crime are compared.

Year	Overall juvenile crime				Juvenile sexual crime		-	ile crime property	Juvenile drug-related crime	
		Vt*		Vt		Vt		Vt		Vt
2000	5093		127		31		1855		860	
2001	6294	123.5814	119	93.70079	26	83.87097	2449	132.0216	1134	131.8605
2002	5154	81.88751	134	112.605	19	73.07692	2075	84.72846	952	83.95062
2003	4508	87.46605	153	114.1791	33	173.6842	1808	87.13253	640	67.22689
2004	4572	101.4197	137	89.54248	22	66.66667	1878	103.8717	432	67.5
2005	4307	94.20385	140	102.1898	50	227.2727	1999	106.443	421	97.4537
2006	4715	109.473	264	188.5714	48	96	2012	100.6503	451	107.1259
2007	4975	105.5143	603	228.4091	59	122.9167	2261	112.3757	255	56.54102
2008	4779	96.0603	757	125.539	59	100	2172	96.06369	200	78.43137
2009	4275	89.45386	623	82.29855	56	94.91525	1840	84.71455	229	114.5
2010	4583	107.2047	658	105.618	67	119.6429	1963	106.6848	271	118.3406
2011	4438	96.83613	534	81.15502	60	89.55224	1856	94.54916	334	123.2472
2012	3035	68.38666	461	86.32959	44	73.33333	1632	87.93103	427	127.8443
2013	2292	75.51895	366	79.39262	26	59.09091	1303	79.84069	118	27.63466

Table 1: Trends in reported juvenile crime in Croatia by type of crime (2000–2013) (Source: Republic of Croatia Ministry of the Interior, 2014)

*Chain index: $Vt = \frac{X_t}{X_{t-1}} \cdot 100$

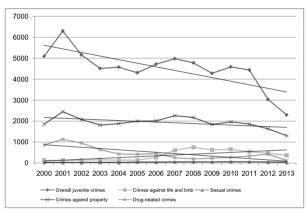
The level of juvenile sexual crime is much lower than the juvenile crime against life and limb, the juvenile crime against property and juvenile drug-related crime. However, juvenile sexual crime is included in the analyses because of the complexity of its individual and social consequences.

Figure 1 shows the average annual decline in total juvenile reported crimes: 171.4 crimes per year (y = -171.41x + 5787; $R^2 = 0.5826$). However, it is important to notice that the same method reveals the average annual increase in reported juvenile crimes against life and limb on the level of 40.9 cases per year (y = 40.932x + 55.582; $R^2 = 0.5231$). The Figure 1 also shows average annual decline in juvenile reported crime related to drugs: 60,3 cases per year (y = -60.312x + 932.63; $R^2 = 0.6794$).

In Figure 1, it is evident that only the trend of juvenile sexual crime does not follow the general declining trend of juvenile crime in Croatia. In Table 1, one can notice considerable variations in juvenile sexual crime rates in Croatia over the last 14 years: it almost doubled in 2003 and more than doubled in 2005, but it was almost halved in 2004, and 2013. It is interesting to note that the declining trend in juvenile sexual crime in Croatia started in 2011, unlike juvenile crime against life and limb and juvenile property crime, which both started decreasing somewhat

earlier, in 2008. The trend of juvenile drug-related crime is also interesting: at the very beginning of the observed period, the number of reported juvenile drug-related offences was still rising, but it was decreasing from 2002 to 2008, and from then until 2013, it was slightly growing, when in 2013, it decreased by 82%. The reason for such a rapid decline is a change in the Croatian Criminal Code (Amendments and Supplements to the Criminal Code, 2012): unauthorised possession of illicit drugs has been decriminalised. Taking into account the trend in the number of reported minors for all types of crime, as well as the forecasts provided, a further decline in the overall number of reported minors up to the year 2016 is expected. The same applies to the number of reported minors for criminal offences against property. In contrast, expected in the same period in the future is an increase in the number of reported minors for criminal offences against life and limb, as well as criminal sexual offences. A forecast for drug-related criminal offences by minors will not be made since there was a significant change in relevant legislation.

Figure 1:
Trends in
reported
juvenile crime
in Croatia by
type of crime
(2000–2013)
(Source:
Republic of
Croatia Ministry
of the Interior,
2014)



As the authors have previously indicated, this paper is not limited only to an analysis of the overall juvenile crime trends and changes in certain groups of offences.

Table 2:
Trends in
reported
juvenile serious
violent criminal
offences
in Croatia
(2000–2013)
(Source:
Republic of
Croatia Ministry
of the Interior,
2014)

Year	Homicide		Bodily injury		Serie	ous bodily injury	Rape	
		Vt		Vt		Vt		Vt
2000	3		0	0	87		9	
2001	2	66.6667	0	0	83	95.4023	1	11.1111
2002	0	0	10	0	94	113.253	6	600
2003	0	0	7	70	111	118.085	0	0
2004	4	0	5	71.4286	105	94.5946	2	0
2005	2	50	4	80	96	91.4286	7	350
2006	4	200	71	1775	78	81.25	9	128.571
2007	2	50	377	530.986	202	258.974	6	66.6667
2008	2	100	468	124.138	113	55.9406	7	116.667

Year	Homicide		Bodily injury		Serie	ous bodily injury	Rape		
		Vt		Vt		Vt		Vt	
2009	0	0	399	85.2564	92	81.4159	2	28.5714	
2010	2	0	431	108.02	102	110.87	6	300	
2011	2	100	367	85.1508	83	81.3726	6	100	
2012	1	50	363	98.9101	87	104.819	8	133.333	
2013	3	300	262	72.1763	63	72.4138	2	25	

Table 2: continuation

Table 2 and Figure 2 show data on three of the most important (homicide, serious bodily injury) and the most frequent (bodily injury) offences against life and limb, and the most important sexual offence (rape). During the first half of the observed period, trends in all four offences are mainly stable. One can only find a sharp decline in the juvenile homicide rate in 2001 when the number of reported juvenile homicides dropped by 33%. This trend is of limited relevance because it results from the low absolute figures: there were three reported juvenile homicides in 2000, and two of them in 2001. Similar oscillations are repeated throughout the period under examination. The number of reported juvenile homicides was halved in 2005, 2007, and 2012, but again the highest absolute figure was four reported offences per year.

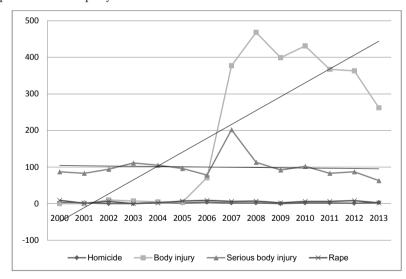


Figure 2: Trends in reported juvenile serious violent criminal offences in Croatia (2000–2013) (Source: Republic of Croatia Ministry of the Interior, 2014)

An increase in the number of juvenile homicides occurred only in 2006 when it was doubled and in 2013 when there were three times more juvenile homicides than in 2012. Once again, it is necessary to stress that behind these alarming increases there are small absolute numbers: when talking about a doubled number of homicides in 2006 it is actually an increase from two such cases in 2005 to four cases in 2006. It is also important to notice that from 2002 to 2005, and again in 2009 and 2010, there was no reported juvenile homicide at all. Taking

into consideration the forecast that can be found in Figure 1, expected in the next three years is a further, yet modest increase in the number of reported homicides committed by minors.

A similar phenomenon of astonishing but no such alarming oscillations in the number of reported cases can be observed with rape: in 2002, there was an increase of 500%, which sounds not only alarming, but even disturbing and upsetting. The fact is that the upsurge resulted there was only one reported juvenile rape in 2001, and six of them in 2002. There was a sharp increase of 250% in the number of reported juvenile rapes again in 2005, but we have to be aware that there were two reported juvenile rapes in 2004, and four of them in 2005. Something similar happened in 2013, when the rate of reported juvenile rapes even tripled, however from one reported case in 2012 to three reported cases in 2013. The declines in reported juvenile rape during the observed period are also "astonishing": in 2001 by 79% (from nine reported juvenile rapes in 2000 to just one such case in 2001), in 2009 by 71% (from seven reported juvenile rapes in 2008 to two reported juvenile rapes in 2009), and finally in 2013 by 75% (from eight in 2012 to two in 2013). In 2003 and 2004, there were no reported juvenile rapes in Croatia. By examining the forecast of the linear trend presented in Figure 1, it can be seen that a modest increase in the number of rapes committed by minors can be expected up to the year 2016 in Croatia.

What should concern us here is the trend in the number of reported bodily injuries. Figure 2 reveals noticeable increase: 37.9 cases per year (y = 37.908x + 10.008x + 186.879; $R^2 = 0.6528$). In the first two years of this century, there were no reported juvenile bodily injuries at all (Table 2). From 2003 to 2005, there are just a few such cases per year: the fewest number of cases occurred in 2005, when there were only four such cases, while the peak was ten reported bodily injuries in 2002. From 2006, the number of reported juvenile bodily injuries was rising substantially until 2008. Unfortunately, this cannot be attributed to small absolute figures that result in impressive rising trends. From the data presented in Table 2, one can notice an increase from four reported juvenile bodily injuries in 2005 to 71 reported juvenile bodily injuries in 2006. In 2007, there were already 377 reported bodily injuries perpetrated by juveniles, which grew to an astonishing 468 such cases in 2008. It is also apparent from Table 2 that the same rate of reported bodily injuries committed by juveniles was maintained over the following four years, with its minimum in 2012 (N = 363) and maximum in 2010 (N = 431), which is a drastically different situation compared to the one from the first half of the observed period. Only in 2013, the first noticeable decline by 28% in the number of reported bodily injuries committed by juveniles was recorded. However, according to Figure 2, the forecast for the next three years is a statistically significant substantial increase.

The trend in reported juvenile serious bodily injuries provides somewhat less cause for concern: it also shows a dramatic increase by 158% in 2007, but since then it was mostly decreasing. Of course, one has to be aware that it is an offence with serious consequences, so despite a relatively stable trend, it is necessary to keep it in focus. It should also be noticed that absolute figures of such cases are not as low as when speaking about homicide or rape, but they are still not as high as figures of reported bodily injuries committed by juveniles in the second half of the

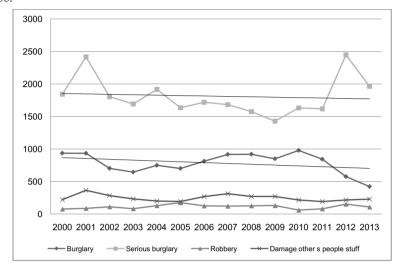
observed period. The forecast for the next three years is that the number of serious
bodily injuries committed by minors will continue to decrease.

Year	Theft		Aggra	vated theft	Robbe	ry	Proper	rty damage
		Vt		Vt		Vt		Vt
2000	935		1843		76		220	
2001	934	99.893	2416	131.091	86	113.158	364	165.455
2002	701	75.0535	1803	74.6275	111	129.07	282	77.4725
2003	644	91.8688	1692	93.8436	82	73.8739	231	81.9149
2004	748	116.149	1917	113.298	129	157.317	199	86.1472
2005	700	93.5829	1634	85.2374	175	135.659	193	96.9849
2006	812	116	1718	105.141	125	71.4286	267	138.342
2007	916	112.808	1682	97.9045	121	96.8	312	116.854
2008	919	100.328	1574	93.5791	126	104.132	270	86.5385
2009	849	92.383	1427	90.6607	130	103.175	270	100
2010	978	115.194	1631	114.296	60	46.1539	215	79.6296
2011	842	86.0941	1617	99.1416	79	131.667	191	88.8372
2012	575	68.2898	2447	151.33	152	192.405	216	113.089
2013	421	73.2174	1964	80.2615	107	70.3947	228	105.556

Table 3:
Trends in
reported
juvenile
criminal
offenses against
property
in Croatia
(2000–2013)
(Source:
Republic of
Croatia Ministry
of the Interior,
2014)

Regarding juvenile property crime in Croatia, the declining trend has already been presented in Table 1 and Figure 1, but in Table 3 and Figure 3 one can find a further analysis of trends in the most common offences against property committed by juveniles: theft, aggravated theft, robbery and property damage. In the context of the dilemma about the seriousness of the problem of juvenile crime and violence indicated in the introduction, it is interesting to note that all of the observed offences against property do not follow the general declining trend of juvenile property crime in Croatia. Furthermore, the trends of reported juvenile aggravated theft and robbery tend to be opposite to this general trend. The number of aggravated thefts committed by juveniles increased by 31% in 2001 and by 51% in 2012, and oscillated considerably over the entire observed period. A similar situation can be observed in reported juvenile robberies in Croatia: one can clearly see an upsurge by 29% in 2002, 57% in 2004, 35% in 2005, 31% in 2011 and even 92% in 2012. There were also some large decreases in the number of reported juvenile robberies: by nearly 30% in 2003, 2006 and 2013, and by 54% in 2010. In contrast, the trend in reported juvenile theft rates was in a continuous slight decline, leading to more than a halving of the number of such cases at the end of the observed period (N = 421) compared to its beginning (N = 935). It is also to be noticed here that we are talking about huge absolute numbers of reported juvenile offenders for all of the four observed offences against property. There were 1843 reported juvenile aggravated thefts in 2000 and 1964 in 2013. When speaking about the juvenile robbery, there were 76 reported cases in 2000 and 107 in 2013. Finally, there were 220 reported cases of juvenile property damage in 2000 and 228 of them in 2013. Although the number of reported cases of property damage perpetrated by juveniles was the same at the beginning and the end of the observed period, there are considerable oscillations in that number over the observed period. The largest increase by 65% was recorded in 2001, followed by 38% in 2006.

Figure 3:
Trends in
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(Source:
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Taking into account the obtained forecasts, expected in the next three years are further oscillations in the number of reported criminal offences of theft, aggravated theft and property damage. The only exception is the criminal offence of robbery, which is, according to the linear trend forecasts, expected to decline in the 2014 to 2016 period.

Table 4:
Trends in
reported
juvenile
criminal
offenses against
public order
in Croatia
(2000–2013)
(Source:
Republic of
Croatia Ministry
of the Interior,
2014)

Year	Vio	lent behaviour		Attack on a public official
		Vt		Vt
2000	37		20	
2001	23	62.1622	25	125
2002	43	186.957	28	112
2003	41	95.3488	7	25
2004	50	121.951	26	371.429
2005	59	118	18	69.2308
2006	69	116.949	25	138.889
2007	78	113.043	7	28
2008	114	146.154	16	228.571
2009	91	79.8246	17	106.25
2010	87	95.6044	27	158.824
2011	84	96.5517	29	107.407
2012	-	-	14	48.2759
2013	-	-	33	235.714

Finally, in Table 4 and Figure 4, one can find trends in two violent offences against the public order: violent behaviour and attack on a public official. These two offences are observed separately for at least two reasons. Firstly, they are criminal offenses with elements of violence, which is interesting for the purpose of this study and because of the dilemmas that were underlined in the introduction. Secondly, previous studies that focused on juvenile delinquency in Croatia during the war and immediately after the war (Cajner Mraović & Stamatel, 2000) revealed a sharp rise in the number of attacks on a public official committed by juveniles in the years following the end of the war.

Data regarding juvenile attacks on public officials in this century in Croatia are rather inconsistent and even confusing. As presented in Table 4 and Figure 4, this upsurge in the late nineties was followed by a highly variable trend between 2000 and 2013. There were sharp increases in some of the years, as well as sharp decreases in others, and only three years in which the trend remained relatively stable. The largest increases were in 2004 (by 271%), 2008 (by 128%), and 2013 (by 135%). In 2003 and 2007, there were substantial declines by an astonishing three-quarters of cases compared to the previous years. The absolute figures were again under 100 and approximately at the level in the mid-nineties, before the mentioned rapid and sharp post-war increase.

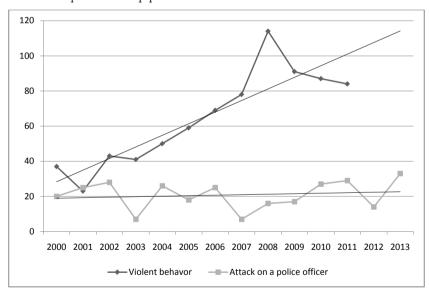


Figure 4:
Trends in
reported
juvenile
criminal
offenses against
public order
in Croatia
(2000–2013)
(Source:
Republic of
Croatia Ministry
of the Interior,
2014)

When speaking of juvenile violent behaviour in Croatia in the period observed in this study, it is important to point out the substantial upward trend between 2002 and 2008, followed by slight declines in 2009, 2010, and 2011. Until 2012, there is average annual increase on the level of 6,6 cases per year cases (y = 86.879 + 6.6014x; $R^2 = 0.7814$). There are no data for 2012 and 2013 due to the changes in the Croatian Criminal Code, which entered into force on 1 January 2012, where by this offence was moved into the misdemeanour category.

According to the obtained forecasts, a further increase in the number of reported minors for the criminal offence of violent behaviour would be expected in the period up to the year 2016. However, due to the changes in the Criminal Code that came into force on 1 January 2012, this criminal offence was moved into the misdemeanour category and is no longer included and monitored in criminal offence statistics.

Although the differences among the numbers of four different types of juvenile crime (against life and limb, sexual crime, against property and drug-related crime) in the whole observed period 2000-2013 might be obvious from the raw data of the Table 1, the appropriate test is needed for statistical confirmation. Since four mentioned types of juvenile crime are observed at the same 14 successive years, and the sample is small, distributions deflect from normality and variances are heterogeneous, we conducted nonparametric Friedman test (Table 5).

Table 5: Differences in juvenile crime trends in Croatia (2000-2013) -Friedman test

	Mean Rank
Crime_Life_Body	2.50
Crime_Sexual	1.00
Crime_Property	4.00
Crime_Drugs	2.50
N	14
Chi-square	37.800
df	3
р	0.000

The test confirmed significant differences among four types of juvenile crime, especially between the number of sexual crime and crime against property. These differences are obvious from the descriptive indicators of the four crime type's numbers in the observed period (Table 6).

Table 6: Differences in juvenile crime trends in Croatia (2000-2013)

:		N	Mean	Std. Deviation	Minimum	Maximum
S	Crime_Life_Body	14	362.5714	236.75554	119.00	757.00
s	Crime_Sexual	14	42.8571	16.31355	19.00	67.00
a	Crime_Property	14	1935.9286	275.86437	1303.00	2449.00
)	Crime_Drugs	14	480.2857	306.09210	118.00	1134.00

descriptive

To analyze the relation between the overall juvenile crime and it's four statistics important components during the observed period of 14 years, we correlated a number of overall juvenile crime with number of (1) juvenile crime against life and limb, (2) juvenile sexual crime, (3) juvenile crime against property, and (4) juvenile drug-related crime. Pearson correlations are presented in Table 7.

		Crime Total	Crime against life and limb	Sexual crime	Property crime	Drug- related crime
Crime Total	Pearson Correlation	1	240	045	.907**	.656*
	p (2-tailed)		.408	.878	.000	.011
	N	14	14	14	14	14
Crime against	Pearson Correlation	240	1	.813**	013	729**
life and limb	p (2-tailed)	.408		.000	.965	.003
	N	14	14	14	14	14
Sexual crime	Pearson Correlation	045	.813**	1	.166	630*
	p (2-tailed)	.878	.000		.571	.016
	N	14	14	14	14	14
Property crime	Pearson Correlation	.907**	013	.166	1	.440
	p (2-tailed)	.000	.965	.571		.115
	N	14	14	14	14	14
Drug- related	Pearson Correlation	.656*	729**	630*	.440	1
crime	p (2-tailed)	.011	.003	.016	.115	
	N	14	14	14	14	14

Table 7: Pearson correlations between juvenile crime trends in Croatia (2000–2013)

** p < 0.01; * p < 0.05

The data presented in the Table 7 suggest the statistically significant positive correlation between overall juvenile reported crime and reported juvenile crime against property, as well as between overall reported juvenile crime and reported juvenile drug-related crime. The statistically significant correlation between reported overall juvenile crime and reported juvenile crime against property is understandable because near half of all juvenile offenses constitute offenses against property. However, it is interesting here revealed the positive correlation between reported overall juvenile crime and reported juvenile drug-related crime, because drug-related crime absorbs only 5% to max 20% of all reported juvenile crime. It is also interesting to notice statistically significant and high-level negative correlation between reported juvenile drug-related crime and reported juvenile crime against life and limb, and also statistically significant and high negative correlation between reported juvenile drug-related crime and reported juvenile sexual crime.

Because the sample is small (14 observations), and normality of related distributions is hard to analyse, we checked parametric Pearson correlations with non-parametric tau-correlations and obtained the same results (Table 8).

Table 8: Taucorrelations between juvenile crime trends in Croatia (2000–2013)

		Crime Total	Crime against life and limb	Sexual crime	Property crime	Drug-related crime
Crime_Total	Correlation Coefficient	1.000	253	122	.670**	.429*
	p (2-tailed)		.208	.546	.001	.033
	N	14	14	14	14	14
Crime against lift and limb	Correlation Coefficient	253	1.000	.611**	055	692**
	p (2-tailed)	.208		.003	.784	.001
	N	14	14	14	14	14
Sexual crime	Correlation Coefficient	122	.611**	1.000	.078	478*
	p (2-tailed)	.546	.003		.701	.018
	N	14	14	14	14	14
Property crime	Correlation Coefficient	.670**	055	.078	1.000	.187
	p (2-tailed)	.001	.784	.701		.352
	N	14	14	14	14	14
Drug-related cris	Correlation Coefficient	.429*	692**	478*	.187	1.000
	p (2-tailed)	.033	.001	.018	.352	
** < 0.01. * < 0.0	N	14	14	14	14	14

^{**} p < 0.01; * p < 0.05

5 DISCUSSION AND CONCLUSION

The results of the paper provide an overview of the trends and interrelationships between different types of offences committed by juveniles in Croatia in this century. The authors have presented police data on the incidence of reported overall juvenile, violent and property crime in Croatia in the 21st century, and now we shall try to add to them relevant value and context.

It can be concluded that the general trend in Croatia since the beginning of this century is a significant decline in overall juvenile crime, as well as a decline in criminal offences against life and limb and criminal offences against property, however there was a sharp growth in certain criminal offences such as bodily injury and violent behaviour. There was also an obvious increase in juvenile sexual crime, but absolute figures of reported juvenile sexual offenders are quite low. It is also interesting to notice opposite trends in reported juvenile perpetrators of theft and aggravated theft that occurring at the same time: since 2010, there was a substantial decline of thefts and a rapid growth of aggravated thefts.

When conclusions are to be made based on official police crime statistics, it must be done with caution and their limit must be taken into account: these numbers do not reflect only crime, but also a readiness of victims to report the

crime to the police as well as the likelihood of police to record it. These constraints entail a major dilemma in the interpretation of data and open up opportunities for fundamentally different and even quite contradictory interpretations of the given data. For example, it is questionable whether declining trends in reported crime rates are positive because they may reflect the functioning of formal and informal social control in society rather than crime on its own. In contrast, an increase in crime rates may indicate not just a worsening of the state of crime, but also greater awareness and readiness among citizens to report crimes, or greater focus of institutions of formal social control on certain types of crime. It can be assumed that just such a thing occurred in Croatia regarding bodily injury committed by juveniles. Until 2000, criminal proceedings for the criminal offence of bodily injury were instituted upon a private suit, except when the victim was a person under the age of 18. This provision was restored to the criminal code in 2006. Considering that minors often inflict bodily harm to their peers, it becomes clear why there were no or only a few reported bodily injuries committed by juveniles per year in the period from 2000 and 2005. The private lawsuit could cause expenses and other types inconvenience for victims, so victims are not motivated to report crimes if the prosecution is based only on a private lawsuit. For this reason, in situations when perpetrators and victims are juveniles, their families tend to neglect this as a kind of rough play between youngsters. Although it may seem strange, it is understandable because criminal proceedings for the criminal offence of bodily injury instituted upon a private lawsuit mean that such types of criminal behaviour are not important for society, but only for the victim as an individual person. In 2006, the Criminal Code was changed and bodily injury in the cases of victims under 18 years of age is once to be again prosecuted not by the private lawsuit but by official action. It has already been mentioned that juvenile perpetrators of bodily injury usually victimised their peers, so we can understand that in 2006, 71 such cases were reported. This change in the Criminal Code entered into force on 1 October 2006 (Amendments and Supplements to the Criminal Code, 2006), so the real number of such cases can be observed for the first time in 2007, and it amounts to 377 reported cases. One can assume that this turn in criminal policy has also affected the recording of serious bodily injuries: from 2000 and 2006 there were approx. 100 such cases reported per year, but in 2007 there were 202 reported serious bodily injuries committed by juveniles.

The given data has also revealed that all changes in the nature and scope of juvenile crime in Croatia cannot be explained only through relevant changes in formal and informal social control. For example, there have been no relevant changes in the Criminal Code regarding theft and aggravated theft, and both are typical juvenile crimes, however juvenile theft was decreasing over recent years and aggravated theft was rising in the same period. One can conclude that these two trends indicate the increasing propensity of juveniles to commit more serious offences. On the other hand, after the upsurge in 2001, there was no substantial increase in the number of juvenile property damage case therefore, the conclusion about growing juvenile propensity to serious and violent offences has been brought into question.

The most questionable is the trend in recorded violent behaviour perpetrated by juveniles: the given data reveal that the number of reported cases was substantially rising in the entire observed period until 2013 when it is moved from the Criminal Code to the Misdemeanours Act (Turković at al., 2013). One can hardly be sure if this increase resulted mainly due to the growing propensity of youth for violence, or if it is a matter of enhanced control of violence in Croatian schools in the same period. It is worth nothing that the year 2000 marks the very beginnings of an interdisciplinary approach to the problem of violence among pupils in schools in Croatia, and since 2004 there has been Rules and procedures in cases of violence among children and youth have been applied.

Return to the problem that was the reason for this analysis, referring to the dilemmas and controversies about the nature and scope of juvenile crime in Croatia in this century, it is obvious that the given data provide support for the various theses. The immediately noticeable trend of decline in overall juvenile crime, or the decline in juvenile property crime, which is the most frequent one, as well as the decline in juvenile crime against life and limb, which is the most dangerous one, lead to the conclusion that juvenile crime in Croatia does not pose a serious problem. On the other hand, the rapid increase in certain criminal offences as bodily injury or violent behaviour provide reason for concern and support those who claim that juvenile crime, especially juvenile violent crime is increasing dramatically and poses a serious threat to Croatian society. It has been already pointed out in the introduction to this paper why it is important to resolve these dilemmas, so here is attempt will be further to explain them despite the given data that seem confusing. The solution to these dilemmas certainly involves dealing with complex social changes that have affected not just post-war Croatia, but also other transitional and even non-transitional European countries. Here an attempt will be made to resolve this dilemma by suggesting the use of a two or three key criminological theories and starting with the following three key theses:

Dilemmas about the extent of the problem of juvenile delinquency also exist in non-transitional European countries, and only because of the stability of the relevant social institutions are than far less pronounced. In the introduction to this paper, comparative analyses have been presented that reveal upward trends in juvenile crime, as well as a significant increase in juvenile violence in post-war Western European countries.

Although we do not initially favour any of the options, and although this is not deal with in this paper, we have to recall the fact that trends in juvenile crime do not seem so alarming when compared to the trends in adult crime in the same countries and the same period (Cartuyvels & Bailleau, 2010). If the situation is dramatic, then it applies to all crimes, regardless of the age of the offender. Of course, from the standpoint of criminological forecasts, juvenile delinquency is always a bigger concern for experts and the general public. However, it should not be a reason for exaggeration in the assessment of the situation.

The results of this paper partly confirm the results of previous research that depict juvenile crime as becoming ever more violent (Šelih, 2012), but we also take into account the possibility that the observed and perceived increase in juvenile violence is partly the result of the growing attention given to the problem.

According to Estrada (1999), two theoretical models are most often used in the literature to explain oscillating and rising trends in juvenile crime during

the period of rapid social change: the theory of routine activities and the social control theory. On the other hand, comparative criminologists are warning of the need to test the generalizability of crime theories and known correlates of crime to settings other than where they originated, which is typically the United States (La Free, 2007; Stamatel, 2009). According to Stamatel (2012: 159), "the fall of communism in Eastern Europe provided a new opportunity to test these theories in geographically, politically, culturally, and economically different settings than previous studies".

One can conclude that dilemmas about the extent and seriousness of the juvenile crime problem in Croatia could be solved by further analyses which must include data collected by the *ISRD* and *ICVS*, as well as analyses in which the Croatian socio-historical context will be more carefully considered. The latter certainly includes analyses of trends and predictions of juvenile delinquency in Croatia for at least three to four decades.

Future research should also explain here identified the impact of drug-related crime on the overall juvenile crime, juvenile violence against life and limb and juvenile sexual violence. The available data in this paper are not enough for in-depth analysis of these statistically significant correlations. At this level of analysis, it can only be assumed that part of the reason for the revealed correlations between trends in the numbers of juvenile reported criminal offenses should be located in some aspects of formal social control.

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