

# Self-injury and Its Criminal Correlates among Hungarian Juvenile Offenders

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*Self-injury is an important problem in incarcerated populations worldwide. This behaviour may be explained by circumstantial factors as incarceration per se may trigger stress responses that result in suicide and other forms of self-harming. On the other hand, certain psychiatric disorders are associated with an increased risk of self-injury and recent findings suggest that psychiatric disorders are highly prevalent in prison and reformatory populations. As a first attempt to study this issue in Hungarian underage criminals, we investigated the prevalence of self-injury and suicidal ideation in reformatory institutions. These were established in 84 incarcerated male juvenile offenders by the MINI KID structured psychiatric inventory. The study lasted 2 years. About one sixth (16.66%) of offenders had a suicidal history. More than half showed self-harming behaviour (N = 47, 55.95%) and 5 subjects reported suicidal ideation at the time of the assessment (5.95%). The suicidal tendency did not reach the level of actual life-threatening condition in any participant. These findings show that self-harming behaviour is rather frequent in the correctional system and requires further research, e.g. studies on the psychiatric antecedents of this behaviour. The findings of such studies may be applicable both in practice and in the education of law enforcement professionals.*

**Keywords:** juvenile offender, suicidal behaviour, self-injury, criminal psychiatry, criminal psychology

## Introduction

Self-injury is a major issue in correctional facilities. Although self-harming behaviour is often associated with suicidal tendencies, it is well known for the scientific society that self-injury can be triggered by other intentions besides the desire of death. In terms of self-injury both the incarcerated and adolescent population is considered to be high risk, hence juvenile offenders deserve an even greater attention in correlation to self-injury. In

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the present study we introduce the partial results of an ongoing study carried out among juvenile offenders with the aim to estimate the relevance of self-injury and its criminal correlates among underage detainees.

The term of suicide is surrounded by much misconception not only among laics, but sometimes practitioners of helping professions are not familiar with the actual nature of suicide and related phenomena. It has a great importance to emphasise the difference between non-suicidal self-injury and suicidal behaviour. In the first case the intentional self-directed violence has no suicidal goal. Even if the act of violence is so severe that it could lead to fatal consequences, if the intent of dying is not present, it cannot be treated as suicidal behaviour.<sup>4</sup> This difference between suicide and non-suicidal self-harm is very important to make clear, since some serious psychiatric conditions may come with self-directed violence that can be easily mistaken to suicidal behaviour, since the motivation of the act cannot be understood by simple logic.<sup>5</sup> Although non-suicidal behaviour may seem un-logical for many, it has been studied for several occasions and researcher discovered many potential triggers behind this odd behaviour. Affect regulation is one of the most common reasons for self-injury; some individuals, especially the ones with severe emotional deficit use self-injury as a tool of affection-control in the time of stress and acute negative feelings.<sup>6</sup> Other reasons of non-suicidal self-injury can be self-punishment, interpersonal influence or sensation-seeking.<sup>7</sup> In case of non-suicidal self-injury, the lack of the desire of death is conscious; the subject him(her)self denies the intention of dying. It sounds simple and gives the impression that recognising non-suicidal behaviour is easy, although one must remember: the motivation of self-injury is often manipulation and taking over control – and this has great significance in prisons.<sup>8</sup> Suicide on the other hand can be unconscious or if the subject is well aware of his will of dying, he may dissimulate it.<sup>9</sup> Therefore any kind of self-injurious behaviour require close attention and care. Suicidal behaviour includes further subcategories. Most authors distinguish suicide from suicide attempt. Suicide is a self-directed violent act that results in the death of the person. Suicidal attempt on the other hand does not end with the person's decease, although death is avoided despite the subject's intention. Suicidal behaviour can mean only suicidal ideation as well. In case of suicidal ideation, the suicidal intent is not definite. The subject may fantasise about his death or wish to die, but the actual decision has not been made yet. Suicidal ideation has different levels that indicate the severity of the person's condition. For example, when the suicidal ideation is only a phantasy about dying without specific details or planning, the condition is not so threatening. But when the person has already thought through the details of a potential suicide, e.g. the time and place, the surroundings should be alarmed.<sup>10</sup>

<sup>4</sup> ANDRIESEN 2006: 533–538.

<sup>5</sup> LEE et al. 2021: 1696–1704.

<sup>6</sup> NIEDTFELD 2010: 383–391.

<sup>7</sup> KLONSKY 2007: 226–239.

<sup>8</sup> JOHANNES–KONRAD 2006: 370–385.

<sup>9</sup> POMPILI et al. 2012: 1–9; FREDENTHAL 2007: 57–70.

<sup>10</sup> KLONSKY et al. 2016: 307–330.

Self-injury is an important topic both for theoretical and practical professionals. During the last decades, several researchers targeted this subject, and they found the prevalence of self-injury – both suicidal and non-suicidal – is world-widely high.<sup>11</sup> Within the high rates of self-harming behaviour in normal population, the prevalence observed among adolescents is even higher. A systematic review that summarised the results of 52 empirical studies found that the prevalence of non-suicidal self-harm is around 18% in this special population.<sup>12</sup> Another systematic review reported a prevalence of suicidal attempts committed by adolescents within the range of 9.7–29.9% based on the results of 128 studies.<sup>13</sup> Self-injury is common in prisons as well. Some authors suggest that suicide attempts occur in the antecedent of 8.6% of male prisoners.<sup>14</sup> The number of prisoners showing non-suicidal self-harm have higher rates, it falls into the range of 15–35%.<sup>15</sup> Considering these findings, high prevalence of self-injury and suicidal acts can be expected among juvenile offenders and empirical findings suggest so. Some empirical data proved that about 20% of underage offenders committed some kind of self-harming act in their past and 11–26.8% had at least one suicide attempt.<sup>16</sup> In Hungary only a few studies aim to explore self-injury among underage offenders. An impressive study of them found that more than 20% of juvenile detainees commit non-suicidal self-injury in domestic underage population.<sup>17</sup>

Suicidal behaviour and self-injurious tendencies can manifest in various acts. The most common methods of suicide are self-hanging, drug poisoning, gas poisoning, chemical poisoning, self-immolation, suicide with weapon, drowning, stabbing and jumping from heights.<sup>18</sup> In the Hungarian population similar results have been found.<sup>19</sup> It is a widely known fact that the method of suicide differs by gender. For males violent and more fatal acts of suicide is characteristic such as suicide with gun-shot or self-hanging.<sup>20</sup> Non-suicidal self-injury is correlated with different methods than those self-directed violence triggered by the intent of death. Superficial skin-cutting is highly the most frequent non-suicidal self-harm method. It is followed by head-banging, scratching, hitting and burning.<sup>21</sup> As discussed above, inmates of correctional facilities are at a high risk of self-injury, both suicidal and non-suicidal. It is especially true to juvenile offenders. Therefore, numerous studies exploring the rates of self-harming behaviour used samples of underage detainees. They found that self-hanging is the most common method of suicide in correctional facilities as well. Drug and/or alcohol overdose, slashing wrist and other body parts, asphyxiation and head banging are also

<sup>11</sup> KLONSKY 2011: 1981–1986; KATZ et al. 2016: 125–127.

<sup>12</sup> MUEHLENKAMP et al. 2012: 1–9.

<sup>13</sup> EVANS et al. 2005: 239–250.

<sup>14</sup> FAVRIL 2022.

<sup>15</sup> DIXON-GORDON 2012: 33–50.

<sup>16</sup> KOPOSOV et al. 2021; STOKES et al. 2015: 222–242.

<sup>17</sup> REINHARDT et al. 2022: 226–244.

<sup>18</sup> MOROVATDAR et al. 2013: 335–344; THOMAS et al. 2013: 235–239; LIM et al. 2014: 1–4.

<sup>19</sup> ELEKES 1997: 151–169.

<sup>20</sup> CALLANAN–DAVIS 2012: 857–869.

<sup>21</sup> CIPRIANO et al. 2017.

common. Less prevalent suicidal methods were found as well such as self-immolation, drowning, starvation, jumping from a moving car or train and jumping from a height. Among non-suicidal self-injurious methods cutting the skin, cutting off oxygen, banging head against the wall and kicking/punching things, eating foreign objects, cigarette or lighter burns and biting of skin are common in underage-detainee population.<sup>22</sup>

The high prevalence of suicidal and non-suicidal self-harm among offenders may have significance by several aspects. One of these is the correlation between violence and self-injurious tendencies which have been proved for several occasions on empirical level. Aggression and personality traits correlated with violent tendencies increase the risk of self-injurious conduct significantly.<sup>23</sup> In a study, for example, violent institutional misconduct is associated with self-harm among prison inmates.<sup>24</sup> The association between violent crime and self-harm was observed as well. During a Danish cohort study childhood trauma – in this case loss of a parent – increased the risk of both violent crime and self-injury.<sup>25</sup> In another research not only the violent nature of the crime was examined, but the style of the act of self-harm as well, and results suggested that both violent and non-violent self-injurious methods are more frequent among violent offenders.<sup>26</sup>

These scientific data raise the need to make further efforts to have an insight to the self-harming behaviour of juvenile criminals. The knowledge about self-injury in juvenile prisons and reformatories can be fruitful both for the staff of correctional facilities and medical professionals during their work for the well-being of such a high-risk population. Although the high prevalence of self-harming behaviour and its relationship with violence is well known, there are only little data about the self-injurious tendencies of domestic juvenile offender population apart from a few examples.<sup>27</sup> The aim of the present paper is to investigate the prevalence of self-harm –both suicidal and non-suicidal – and its criminal correlates with special regard on the violent nature of the crime among juvenile offenders. For assessing self-harming behaviour a structured diagnostic interview was applied and completed with criminal data withdrawn from institutional record.

## Method

The study included cross-over psychiatric assessment combined by retrospective data analysis.

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<sup>22</sup> KENNY et al. 2008: 358–382; MOORE et al. 2015: 243–254.

<sup>23</sup> GVION-APTER 2011: 93–112; PICKARD 2015: 71–90.

<sup>24</sup> SLADE et al. 2020: 182–198.

<sup>25</sup> CARR et al. 2020: 1224–1232.

<sup>26</sup> WEBB et al. 2013: 237–244.

<sup>27</sup> FARKAS-SÓFI 2020: 42–54; KEREZSI et al. 2008: 1–34.

## **Participants**

The sample of the study consisted of 84 juvenile offenders. All of them were male between the age range from 13 to 20 year ( $M = 16.46$ ;  $SD = 1.312$ ). All of the subjects were inhabitants of the Reformatory of Budapest, Hungary. The participants were under detention awaiting a court hearing or spending their sentence in juvenile correctional care. The capacity of the facility is 100 people. Juvenile offenders stay there about two years – it depends on the nature of the crime and the judicial decision. The subjects participated in the research voluntarily. Before the assessment, oral and written information was given about the purpose and content of the study. Written informed consent was signed by all the participants and their legal guardians. Research data was treated confidentially and used only for scientific purposes. Juvenile detainees who refused to participate or were under any condition to hinder the cooperation or understanding the procedures were excluded.

## **Setting**

Psychiatric assessment was conducted during a 2-year period between 2020 and 2021. To assess the levels of self-harm, the Hungarian version of the MINI KID was applied. While completing the psychiatric evaluation, basic criminal and socio-demographic data was drawn from the institution's record. The MINI KID semi-structured interview was conducted during a roughly one-hour long session by a trained psychiatrist. The sessions were being timed in the afternoon since the participants are still attending secondary school.<sup>28</sup>

## **Psychiatric evaluation – The assessment of self-injury**

The Neuropsychiatric Interview for Children and Adolescents (M.I.N.I. KID 7.0.2) is a structured diagnostic interview based on DSM 5.<sup>29</sup> The MINI explores the mental condition through 25 modules that includes suicidal past, tendency and non-suicidal self-harming behaviour. The MINI has a high interrater reliability and validity and has been used for measuring psychiatric state among underage offenders for several occasions.<sup>30</sup>

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<sup>28</sup> SHEEHAN et al. 1998: 22–33.

<sup>29</sup> American Psychiatric Association 2013.

<sup>30</sup> SHEEHAN 1998: 22–33; BALÁZS et al. 2014: 282–287.

## Statistics

The results were analysed by SPSS version 26. Sociodemographic, clinical and criminal features were analysed by descriptive statistics. The self-injury prevalence was investigated by the same method. Cross-Tabulation Analyses were admitted to explore the association between self-injury and the type of crime.

## Results

### *Socio-demographic and criminal feature*

The participants aged 13 to 20 ( $M = 16.46$ ,  $SD = 1.312$ ). The juvenile detainees were admitted to the Reformatory of Budapest between March 2014 and November 2021. The legal status of the subjects fell into four categories; parents as legal guardian ( $N = 33$ ; 39.3%), grandparents as legal guardians ( $N = 4$ ; 4.8%), adult ( $N = 3$ ; 3.6%) and court appointed guardian ( $N = 44$ ; 52.4%). The types of crime in the sample were the following: murder, truculence with weapon, sacking, violence against people performing public duty, burglary, mayhem, sexual violence, fraud, traffic with drugs, theft and blackmail. Table 1 below presents the distribution of the sample by the categories of the type of crime.

*Table 1: Categories of the type of crime*

	<b>The type of crime</b>	<b>Number of subjects</b>	<b>Percentage %</b>
Non-violent crime subgroup N = 18 (21.4%)	Fraud	1	1.2
	Traffic with drugs	3	3.6
	Blackmail	1	1.2
	Theft	13	15.5
Violent crime subgroup N = 66 (78.6%)	Murder	8	9.5
	Sacking	4	4.8
	Violence against people performing public duty	2	2.4
	Mayhem	3	3.6
	Burglary	44	52.4
	Sexual violence	3	3.6
	Vigilantism	1	1.2
	Truculence with weapon	1	1.2

*Source: Compiled by the authors.*

## Self-injury

47 (55.95%) participants showed some kind of self-injurious tendency, whether it was prior non-suicidal self-harm, suicide attempt or present suicidal ideation. 44 participants (93.6%–52.38% of the overall sample) committed self-injury without suicidal agenda prior to the examination and 14 (29.8%–16.66% of the overall sample) attempted suicide in the past, 12 (25.53%–14.29% of the overall sample) had both suicidal attempt and other form of self-harming behaviour in their antecedent. 5 young boys (10.6%–5.95% of the overall sample) reported suicidal tendencies that did not reach the life-threatening level and only 2 of them had attempted suicide before.

Based on the type of non-suicidal self-injury two subgroups were created; the first included the ones who hit their fist or head to a solid surface, e.g. wall, piece of furniture – hitting subgroup (N = 13; 27.7%) and self-cutting subgroup (N = 8; 17%), who had cut their skin – mainly on their wrist – without the will to die, and a third subgroup that included participants showing both types of self-harming behaviour – the mixed-group (N = 7; 14.9%). 25 participants (53.2%) explained the self-harming behaviour with anxiety and stress. In their case, self-injury could be considered to be an act of self-sooth. 22 (46.8%) underage detainees reported intensive anger behind their self-harming conduct, that could be taken as tension-releasing behaviour. None of the participants reported manipulative or attention-seeking agenda in relation to the self-injurer activity.

The 14 participants who committed unsuccessful suicidal acts in their past had 2.43 (St = 1.989) suicide attempts on average. The methods of prior suicidal attempts were the following: self-hanging, limb incision, stabbing in the chest, self-ignition, self-detonation, overdose with drugs and jumping from a height. The table includes the distribution of the methods of suicidal attempts.

*Table 2: The distribution of the methods of suicidal attempts*

<b>The method of suicidal attempt</b>	<b>Number of participants</b>
Self-hanging	7 (14.9%)
Limb incision	5 (10.6%)
Stabbing in the chest	1 (2.1%)
Self-ignition	1 (2.1%)
Self-detonation	1 (2.1%)
Overdose with drugs	5 (10.6%)
Jumping from a height	2 (4.3%)

*Source: Compiled by the authors.*

## Self-injury and the type of crime

Two subgroups were created based on the type of crime – violent and non-violent – and were examined by the prevalence of self-injurious behaviour. Among non-violent juvenile offenders 7 (38.9%) committed some kind of self-harming act, 3 (16.7%) had suicide attempt in the past and 1 (5.6%) reported present suicidal ideation. Juvenile offenders with violent type of crime reported prior non-suicidal self-injury in 37 (56%) cases. 11 (16.7%) of them had committed suicide at least once and 4 (6%) suffered from suicidal ideation at the time of the assessment. In the table below we demonstrate the distribution of specific self-injurious behaviour by the type of the crime. Participants committed blackmail, fraud, violence against people performing public duty and vigilantism did not show any kind of self-harming behaviour.

Table 3: The distribution of self-harm by the type of crime

Self-harm		Violent crime						Non-violent crime	
		Murder	Sacking	Mayhem	Burglary	Sexual violence	Truculence with weapon	Traffic with drugs	Theft
Method of suicide attempt	Self-hanging	0	0	0	5	1	1	1	0
	Limb incision	1	0	0	2	0	0	1	1
	Stabbing in the chest	0	0	0	1	0	0	0	0
	Self-ignition	0	0	0	0	0	0	1	0
	Self-detonation	0	0	0	0	0	0	1	0
	Overdose with drugs	0	0	0	3	1	0	0	0
	Jumping from a height	0	0	0	1	0	0	1	0
Type of non-suicidal self-harm	Self-cutting subgroup	1	1	0	6	0	0	0	0
	Hitting subgroup	0	1	2	7	0	1	0	2
	Mixed-group	0	0	0	4	1	0	1	1

Source: Compiled by the authors.

## Discussion

The prevalence of self-injurious behaviour in the sample was high. More than half of the participants show some kind of self-harming behaviour. One third of the sample had at least one suicide attempt in the past and more than two third had deliberate self-injury without the will of dying. These values are outstanding on the international level. As we discussed before, among juvenile offenders the prevalence of suicide or non-suicidal self-injury is around 20%, which is much lower than our findings.<sup>31</sup> This difference could be explained by the high rate of suicide of the domestic population – some authors suggest that the Hungarian population is supposed to be affected greatly by suicide compared to other European countries.<sup>32</sup> This argument may seem logical, although the results of the aforementioned Hungarian study question its relevance. The rates of non-suicidal self-injury that was found during the work of the research team led by Reinhardt were much more consistent with the global tendencies of self-harming.<sup>33</sup> So, the explanation of our result may be found in the small size of our sample that is less than one third of that of the previous study. Either way, only further data collection can give an answer to the question of the vast difference between the prevalence of the two researches. Two major methods of non-suicidal self-injury occurred in the sample; hitting the wall or another solid surface with a limb or the head and cutting the skin. The first was 30% more frequent than the latter, which is not congruent with international results either. The most common non-suicidal self-harming method is usually self-cutting.<sup>34</sup> A little more than half of the young offenders explained their behaviour with self-sooth; the rest did self-injury with the aim of anger release. None of them admitted manipulative or attention-seeking goals behind their actions, which is a very important finding in the light of the misconceptions about self-harming behaviour shown by criminals. It is quite a common stereotype not only among laics but professionals as well that self-injury from the part of offenders always have some kind of deceitful motive.<sup>35</sup> Of course, deception certainly occurs in this population and one must count with the possibility of malingering – deliberate simulation of symptoms of psychiatric disorders or other disease for controlling purpose – when witnessing such behaviour.<sup>36</sup> But ignoring the probability of the presence of a psychiatric condition that manifests in self-harming tendencies is not only unprofessional but extremely dangerous. Empirical data refutes the widespread false idea that only those are in real danger of suicide who do not show alarming conduct or other signs of self-harming behaviour.<sup>37</sup> The methods of parasuicide were

<sup>31</sup> KOPOSOV et al. 2021.

<sup>32</sup> RIHMER et al. 2021: 981–991.

<sup>33</sup> REINHARDT et al. 2022: 226–244.

<sup>34</sup> KENNY et al. 2008: 358–382.

<sup>35</sup> SOUSA et al. 2019.

<sup>36</sup> CASSISI-WORKMAN 1992: 54–58.

<sup>37</sup> MUEHLENKAMP-GUTIERREZ 2007: 69–82.

more congruent with international data. Self-hanging was the most common and findings from abroad suggest the same. Self-hanging was followed by limb incision and drug-overdose.<sup>38</sup>

The correlation between violence and self-injury was discussed afore. In our sample we tempted to estimate the levels of violence based on the nature of the offence. In our sample more than half of the violent offenders committed a self-harming act prior to the assessment and less than 40% of the non-violent subgroup. Although due to the small size of the sample there was no opportunity to measure the difference between the two types of offenders by more sophisticated analysis methods, hence the significance of the result is unknown. However, the seemingly big divergence between the two groups suggests that relevant results can be obtained by involving additional participants. The subtypes of self-harm showed a somewhat different tendency than the total score of self-injurious behaviour. Non-suicidal self-injury and suicidal ideation was more prevalent among violent offenders, but past parasuicide was almost as common. Altogether it seems that the relationship between violence and self-harm reflected the same trend that can be observed abroad.<sup>39</sup> The small diversion that was found in case of parasuicide can be attributed to the size effect of the sample.

## Summary

In the present paper we examined the self-harming behaviour of juvenile offenders with the involvement of 84 underage offenders from Budapest, Hungary. The results were collected with a psychiatric assessment tool designed especially for scientific purposes. Our data suggested that self-harming behaviour, both suicidal and non-suicidal is a major problem in Hungarian underage offender population. The high rates of the prevalence of the phenomena in question suggested an even more serious situation, than it could be estimated based on foreign data. The potential correlation between violence and self-injury was measured, and the findings we obtained were correspondent to the empirical results that had been published before by international studies. Although the size of the sample was small and results should be treated accordingly, they certainly raise the need for further data collection and analysis. The scientific knowledge that can be gained due to such studies may enrich the insight to the criminal psyche of the domestic population that is only little so far. Expertise based on such research may support the work both of theoretical professionals and practitioners from several fields of law enforcement and healthcare.

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<sup>38</sup> KENNY et al. 2008: 358–382.

<sup>39</sup> CARR et al. 2020: 1224–1232.

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