BRAIN. Broad Research in Artificial Intelligence and Neuroscience
ISSN: 2068-0473 | e-ISSN: 2067-3957
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2020, Volume 11, Issue 2, Sup.1, pages: 37-47 | https://doi.org/10.18662/brain/11.2Sup1/92

Self-Harm in Adolescence as Maladaptive Coping

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Abstract: *Psychologists, psychiatrists, doctors, and other associated professions, as well as the public from all over Europe have noticed the negative impact of the COVID-19 pandemic on mental health. In this regard, adolescents appear to be a highly vulnerable group, which is more affected than adults and children in many aspects. This study focuses on a specific and extremely maladaptive way of coping with mental stress and problems – deliberate self-harm. It offers an epidemiological study of the prevalence of self-harm among Slovak youths, its forms and related variables, carried out on a sample of 2,280 adolescents aged 11 – 19 using the SHI questionnaire. The results reveal that within the overall prevalence of 45.2%, the most vulnerable group are girls from non-traditional families who began to self-harm at an early age. The most frequent forms of self-harm among adolescents were torturing with self-defeating thoughts, followed by both direct and indirect forms of physical self-harm. An analysis of the willingness to disclose self-harming behaviour shows that the need to raise awareness of this behaviour should be mostly oriented towards adolescents.*

Keywords: *self-harm; adolescence; prevalence; forms.*

How to cite: Demuthova, S., & Demuth, A. (2020). Self-Harm in Adolescence as Maladaptive Coping. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 11*(2Sup1), 37-47. https://doi.org/10.18662/brain/11.2Sup1/92

1. Introduction

The COVID-19 pandemic has brought intense feelings of insecurity and a radical change in our way of life which has had an impact on the mental health of young people. Adolescents worry about their health as well as the health of those close to them, they feel isolated from their peer contacts that are important to them and the restrictions on their mobility have an immense effect, their daily routine is greatly disturbed, they have lost access to leisure activities... all of which limits the possibilities they have to meet their crucial needs. In more serious cases, they are the witnesses or victims of unfavourable domestic circumstances or violence and they lack access to psychological help. Yet, young people must live through these complications whilst also experiencing the challenging transition from childhood to adulthood (Casey et al., 2010), including the search for their own identity (Pfeifer & Berkman, 2018), sexual, emotional, and moral maturation (Bonnie & Backes, 2019), loosening of ties with the nuclear family and the formation of their first intimate relationships (Jager et al. 2015), the choice of a future profession... At the same time, it is a period of emotional instability (Larson et al., 2002), of inner uncertainty and the absence of verified and functional coping strategies, which only makes the situation even more complicated.

As is it difficult to cope with all of these developmental needs, with the radical changes in life and a lack of maturity in the areas that could potentially help to deal with these problems, adolescents tend to opt for maladaptive coping strategies. A very serious form is that of self-harm usually in order to reduce the impact or distract attention away from negative emotions, to punish oneself, and/or to reduce feelings of numbness or dissociation (Klonsky, 2007). Through such behaviour, individuals feel that they have control over their lives (Petermann & Nitkowski, 2015), which compensates for the absence of control over the current events and experiences. The danger of this type of behaviour not only lies in the health risks it poses (often associated with suicide), but also in its addictive nature (Victor et al., 2012); and in the fact that it does not resolve problems, quite the contrary – it worsens them. In order to improve the mental health care for adolescents and to effectively prevent such behaviour, it is crucial to be aware of the prevalence of self-harm and its associated circumstances.

2. Objectives

The main aim of the study is to obtain the fundamental data relating to self-harming behaviour in adolescents. The secondary objectives include:

- discovering the prevalence of self-harming behaviour in a sample of adolescents;
- describing the forms of self-harming behaviour and their prevalence;
- determining the average age when self-harm began and the average age of self-harming individuals;
- revealing possible differences across genders, age groups and types of family backgrounds in the prevalence of self-harm;
- describing the willingness to disclose self-harming behaviour among self-harming adolescents;
- making essential recommendations for the most effective intervention strategies in the context of the current challenging situation.

3. Method

3.1. Participants and Procedure

The study sample consisted of 2,280 Slovak adolescents (the WHO defines adolescents as the age group 11 – 19 – Aarø, 2007) attending primary or secondary schools. The anonymous collection of data included participants who (or their guardians) gave their informed consent for participation. The questionnaire was administered in a standard manner by trained administrators. Of the total number of 2,280 questionnaires, 61 (0.27%) were excluded due to incorrect data. 2,219 participants were included in the research (63.1% female; mean age of all participants=15.34; st. dev.=1.58 years;), however, considering the sensitive nature of the topic of the research, the participants did not always respond to all questions. For this reason, each analysis was based on the available number of answers in the questionnaires.

3.2. Measures and Statistical Analysis

The data was collected using a modified Self-Harm Inventory (SHI) (Sansone & Sansone, 2010); the aim of the additional questions was to obtain basic demographic data as well as other data (family background, willingness to disclose the self-harm etc.). The SHI is a self-assessment questionnaire that consists of 20 items that reveal the presence of a relatively wide range of forms of self-harming behaviour. The items are preceded by the phrase, "Have you ever intentionally, deliberately to cause yourself

harm…" followed by several forms of self-harming behaviour (see Table 1). The participants were also asked to report how many times the behaviour has occurred as well as the frequency of the occurrence (0=never, 1=rarely, 2=sometimes, 3=often). It is also possible to observe the intensity of prevalence and to measure, using the whole SHI questionnaire, the overall extent (level) of self-harming behaviour. Previous studies (see e.g. Démuthová & Doktorová, 2018) have confirmed the relatively high internal consistency of this method (Cronbach's α=0.809). In order to classify a participant as a member of the group of self-harming individuals, it was necessary to admit to one form of self-harming behaviour with the frequency of 2 or 3 (sometimes or often). Or to admit to several forms of self-harming behaviour with a frequency of 1 or above.

The data analysis was conducted using the IBM SPSS 22 statistical software. The statistical significance threshold (α) in each data analysis was set to 0.05.

4. Results

4.1. Prevalence of Self-Harm

More than half of those in the research sample (56%) have intentionally harmed themselves at least once in their lives. After using the criterion for the classification of an individual as a member of the group of self-harming adolescents (recurrent self-harming behaviour), it may be stated that the prevalence of this phenomenon in the study sample is 45.2%.

The prevalence of self-harming among those of female gender is significantly higher (Pearson Chi-Square=23.114; p=0.000); while the prevalence of self-harming reaches 39% among males, in the case of females, the prevalence reaches up to 49%. This tendency for a higher level of self-harming in those of female gender is also demonstrated in the analyses of the overall extent of self-harm for the group of self-harming individuals – using the SHI questionnaire, females reached an average score of 8.9, whereas men only reached 6.6. The application of Student's t-test showed that the difference is statistically significant (t=4.512; sig.=0.000). An even more striking difference appeared in the analysis of a connection between family backgrounds and self-harm. While the prevalence of self-harming individuals in traditional families reaches 41%, in non-traditional families, the prevalence increases to 57% (Pearson Chi-Square=42.64; p=0.000).

4.2. Forms of Self-Harm

Table 1 clearly shows that all the forms of self-harm studied through the modified SHI questionnaire occurred in the research sample. Participants could list several forms of self-harming behaviour, which happens rather frequently – almost three quarters of the self-harming adolescents used more than one form. The most frequent form of self-harm was torturing with self-defeating thoughts, with a prevalence of 26.8%.

Table 1. The prevalence of the individual forms of self-harm in the adolescent population

Have you ever intentionally, or on purpose, done any of the following:	%	N*
Tortured yourself with self-defeating thoughts	26.8	2,056
Scratched yourself on purpose	25.2	2,012
Hit yourself	24.6	2,025
Cut yourself on purpose	21.6	2,046
Exercised an injury on purpose	20.1	2.057
Banged your head on purpose	18.3	2,040
Abused alcohol to hurt yourself	17.6	2,062
Not slept enough to hurt yourself	14.7	1,992
Starved yourself to hurt yourself	13.8	2,060
Over-exercised to hurt yourself	11.5	2,060
Engaged in emotionally abusive relationships	9.9	2,038
Made medical situations worse on purpose	9.2	2,063
Prevented wounds from healing	8.8	2,051
Burned yourself on purpose	8.1	2,065
Attempted suicide	8.1	2,053
Distanced yourself from God as a punishment	6.8	2,038
Overdosed	3.9	2,064
Abused prescription medication	3.8	2,064
Set yourself up in a relationship to be rejected	3.8	2,061
Abused laxatives to hurt yourself	2.2	2,055

**Note: The percentage was calculated from valid cases (N)*

4.3. Age of Self-Harmers

Student's t-test did not reveal any age differences between the group of self-harmers and non-self-harmers (t=0.886; sig.=0.376). A further analysis showed that the prevalence of self-harming behaviour in the group of self-harmers does not relate to the actual age of the subject – a Pearson

test focused on the correlation between age and the SHI score did not show any relationship (correl. coefficient=0.002; sig.=0.948). On the other hand, it seems that such a relationship exists between the amount of self-harming behaviour (SHI score) and the age of the onset of self-harm (correl. coefficient=-0.121; sig.=0.005) – the earlier the individual starts to self-harm, the more massive the degree of self-harm in adolescence.

4.4. Disclosure of Self-Harm

An important point in the process of helping self-harming adolescents is the moment of disclosure. It is crucial to know to what extent they are willing to communicate their hardships and to whom they disclose this information. Of 1,002 self-harming adolescents only 553 (55.2%) were willing to answer the question of whether they had confided in someone and if they had who they disclosed the information to. The results reveal that most self-harming adolescents try to hide their behaviour from others – 26.7% of the 553 adolescents indicated that they had not told anyone about their self-harming. Figure 1 presents the results for those (N=285) who have told someone about their self-harming behaviour.

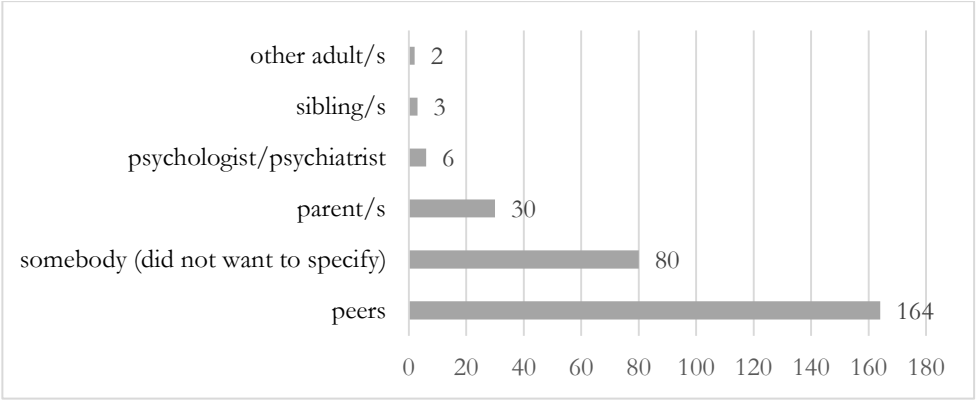

Figure 1. Persons in whom adolescents confide with their self-harming (N=285)

Girls are statistically more prone to disclosure than boys (Chi-Square=13.728; sig.=0.000); 55.9% of them (compared to 37.4% in boys) revealed their self-harming behaviour to someone. It appears that age is not linked to the willingness to disclose – there was no statistically significant difference in age found between the individuals who revealed their behaviour to someone and those who did not (t-value=1.712; sig.=0.088).

5. Discussion

The analysis of the data shows that the prevalence of self-harming behaviour in the study sample is 45.2%. In contrast with the majority of countries, (4.7% in Belgium (Madge et al., 2008), 8% in Australia (Moran et al., 2012), 9.3% in Norway (Tormoen et al., 2013), 10% in England (Hawton et al., 2012) or 20.3% in the United States (Swahn et al., 2012) and 25.6% in Germany (Plener et al., 2009)) it is a rather high level of prevalence. Only a few studies (see e.g. Lundh et al., 2007) have reported similar figures. In addition to the situational and social specificities, this difference may be a consequence of inconsistent methodologies or different understandings of self-harm. In this regard, it may be advisable to promote some scientific activity towards the unification of the definition of this negative phenomenon.

From the perspective of the forms of self-harm the most frequent form was "torturing with self-defeating thoughts"; this belongs among the mental forms of self-harming behaviour (see e.g. St Germain & Hooley, 2012). Although it is indirect and hidden, its effect is just as devastating and strong; however, it targets the mental health of an individual, not their body. This finding leads us to reconsider the concept of self-harm, since there are certain tendencies to limit it to only the direct physical forms (e.g. the concept of non-suicidal self-injury, as proposed by DSM-5, 2013). The need for a broader understanding of self-harm is reaffirmed by the fact that various forms and types occurred in the study sample (mental, or direct and indirect physical forms). Attention must inevitably be paid to the high occurrence of attempted suicide (8.1%) among self-harmers. Considering the high risk of mortality and the rapidly growing prevalence of this behaviour (e.g. Clarke et al., (2019) report a 200% increase in suicides among girls aged 10 – 14 years over the last 15 years), further research and prior intervention is imperative.

From an age perspective, no significant differences were observed in terms of self-harm; this type of behaviour can be seen throughout the whole of adolescence. However, the age of onset of this behaviour plays an important role in its severity, it has a statistically significant correlation with the intensity of self-harm. This has also been reported by other studies (Jung et al., 2018). In this context, it would be appropriate to carry out further studies and analyses to attempt to define the cut point of high-risk age. The most vulnerable group is girls; although it is no longer true that self-harm is an almost exclusively feminine phenomenon, there still are statistics that indicate a higher prevalence amongst women (Laye-Gindhu & Schonert-

Reichl, 2005). This trend may be explained from various perspectives – females are more likely to disclose their problems, whereas males are less likely to report self-harm and consider it a problem; further on, aggression may be more socially acceptable for males, therefore they have the opportunity to turn it outwardly instead of inwardly, which is more typical of females (Victor et al., 2018). In addition to being more prevalent amongst women, the risk of severe self-harm is increased if there is an unstable family background. This highlights the need for broader studies into this issue, for instance oriented towards the high-risk (and protective) factors of self-harming behaviour.

The key moment in helping self-harmers is their willingness to disclose their problems. No intervention can be realised without this step. The analysis of the data we have obtained clearly shows that self-harmers keep their behaviour secret. And even if they disclose it, it is most often only to their peers. Thus, not only is it necessary to inform the high-risk group (self-harmers) about the need for help and what is available, but also the whole adolescents population, since they are usually the decisive individuals in helping self-harmers to reach for help. The overall awareness for the need of mental health care and the help available should represent one of the priorities in every society, especially related to the highly vulnerable youth population. Particularly in the present times, when the COVID-19 pandemic has made it impossible to have face to face contact with others. Activities that aim to disseminate this type of information (e.g. through media – Saha et al. 2019) and make it more accessible should be significantly increased.

6. Conclusions

The issue of self-harming behaviour in adolescence is a highly relevant present-day phenomenon. The current situation in most countries has resulted in a deterioration of the state of mental health, and the population of adolescents is no exception. The options for the implementation of a more suitable approach are limited and help and intervention are difficult to access. Now more than ever it is crucial to intensively promote alternative forms of psychological intervention and to launch an informational campaign focusing on the high-risk section of the population, in order to make support available to as many adolescents as possible. Once the pandemic restrictions are lifted, professionals should be ready to address an increase in the need for psychological and psychiatric help and actively offer intervention in cooperation with teachers and parents

as well as with students. Research into the issue of self-harm should also continue, aiming, in particular, at the study of risk and protective factors.

Acknowledgements

This work was supported by the Slovak Research and Development Agency under contract No. APVV-17-0123.

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