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# From traumatic events and dissociation to body image and depression symptoms – in search of self-destruction syndrome in adolescents who engage in nonsuicidal self-injury

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**Summary**

**Aim.** The aim of the study was to analyze relationships between the variables: severity of depression symptoms, feelings towards one's own body, dissociation, the number and type of traumatic life events experienced by adolescents who engage in deliberate self-injury and are psychiatrically hospitalized.

**Method and material.** We examined 60 patients aged 13–17 ($M$ = 15.48, $SD$ = 1.19). More than a half (55%) were diagnosed with a mixed disturbance of emotions and conduct, 23.5% with depressive behavior disorders, 10% were diagnosed with a depressive episode. The research tools: a socio-demographic survey; original Feelings Towards the Body Questionnaire created on the basis of Tomkiewicz's description; Kovacs's CDI; Scharfetter's Ego-Psychopathology questionnaire.

**Results.** The examined individuals have negative feelings toward their bodies, more than half of them experience severe depression symptoms. There are links between traumatic events, dissociation, body image and the severity of depression symptoms. The strongest links were found: between dissociation vis-a-vis the severity of depression symptoms and the feelings towards one's body; and between the severity of depression symptoms and the feelings towards one's body.

**Conclusions.** Two thirds of the examined individuals attempted suicide. Various forms of direct self-destructive behaviors very often occur simultaneously. It also provokes reflection about the conditions under which self-inflicted injury does (or does not) prevent suicide attempts. Self-mutilation along with the interaction between clinical variables may form a self-destruction syndrome in various mental disorders and contribute to clinical pictures of these disorders, this should be taken into account in diagnosing and treatment of adolescents.

**Key words**: nonsuicidal self-injury, dissociation, depressive symptoms

## Introduction

Self-destructive behavior in the form of self-inflicted injury is a serious, constantly expanding problem that affects young people, especially those who are psychiatrically hospitalized. In 2005, 27% of psychiatric inpatients aged 13–19 in Poland self-mutilated, but over the following two years this rate increased to 47% [1]. The hermetic environment of a psychiatric hospital often leads the patients to undertake self-aggressive behavior either as a result of modeling co-patients or in order to better integrate with the group. For this reason alone although many other intensifying factors are in play (such as: losing one's purpose of life, not getting the sense of being understood, emotional hardships and the fact that self-injury may exert various regulatory functions), self-mutilation is escalating among adolescents, becoming a phenomenon very difficult to control and treat.

Deliberate and repeated self-injuries are so common among adolescents that researchers have come to treat this phenomenon as a disorder that originates during adolescence. The DSM-5 classification lists it as an independent nosological entity which takes on the form of deliberate self-mutilating without suicidal intentions (Nonsuicidal Self-Injury – NNSI) [2]. To better characterize their specific nature, six criteria have been distinguished. Criterion A refers to a specific frequency of self-destructive behaviors – for the disorder to be diagnosed, an individual must have engaged in deliberate self-injury (without suicidal intentions) on at least five days over the past year. Criterion B indicates several effects of self-injury, at least one of which needs to be present: releasing emotional stress (associated with an immediate feeling of relief), regulating interpersonal failures, or generating a positive mood. Criterion C describes mental states associated with self-injuries, one of which needs to be experienced: negative emotions or thoughts (anxiety, anger, tension, annoyance, low self-esteem) appearing right before the act of self-injury, limited control over self-destructive intentions (manifested as a great commitment to self-injurious activity), or intense focus on the not yet fulfilled act of self-injury. Thinking of self-injuries as of a readily available way to free oneself from the pressure of intolerably negative emotions is enough to give a sense of security and ease one's anxiety [3]. Criterion D describes self-directed aggression as a set of behaviors that lie beyond what society deems acceptable (as opposed to tattoos, body piercing, modifying one's body due to cultural or religious reasons). As a result, an individual experiences suffering or disruption in their interpersonal relationships or other important life areas (criterion E). The DSM-5's criterion F narrows the scope of deliberate self-injuries by excluding acts of self-mutilation that result from intoxication, withdrawal symptoms, psychotic episodes, trichotillomania, or stereotypical self-harm occurring in the case of autism spectrum disorders, low intellectual functioning, or Lesch-Nyhan syndrome.

Inflicting intentional injury upon one's body is inseparably linked to pathological experiencing of one's physicality, whose development could have been distorted

or stunted at the very beginning of the adolescence period [4]. The literature on the subject already indicates all kinds of implications resulting from dysfunctional experiencing one's body Self. Manifestations include negative associations with the body, feelings of aversion, disgust or hatred towards it. An additional factor linked to self-injurious behavior is a greater risk of depressive symptoms [5]. Despite the fact that the conducted surveys have been unable to establish unambiguously the direction of the influence between these two variables (to tell the cause from effect), there is no doubt as to their co-occurrence. 20 to 30% of self-mutilating persons were diagnosed with depression, therefore depressive symptoms are a sign of intense subjective mental suffering [1]. For long, broadly defined self-aggression has been treated as a symptom of adolescent depression [6–25].

Research reports also argue that there is a connection between adolescents engaging in self-aggressive behaviors and their family situations. Growing up in conditions of dysfunctional patterns of emotional exchange, where forming true bonds based on trust, love and support is not possible, may be a predictor of self-destructive actions to occur later in the individual's life [3, 26]. Additionally, experiencing traumatic events (sexual harassment, emotional abuse, neglect, etc.) increases the risk of future self-destructive tendencies, as well as acting out in response to pushing the trauma down into unconsciousness. Any negative life events dramatically alter the individual's overall functioning, sometimes even changing awareness levels, leading to emotional numbness and cutoff, which in turn contributes to triggering dissociative states as a defense.

One of the main dissociative disorders, according to DSM-5 (apart from dissociative amnesia, dissociative identity disorder, and other specified or not specified dissociative disorders), is depersonalization/derealization disorder [2]. Depersonalization is directly associated with unpleasant feelings of strangeness, with disrupted self-identity, and with body identification disorders. It may be accompanied by feelings of emotional freezing and of one's thoughts being detached from one's mental activity. It has been reported that these states often appear as a result of a trauma, when they provide a kind of protective shield, allowing one to escape the overwhelming emotions and other adverse effects of a traumatic event [27, 28]. Adolescents who deliberately self-mutilate often report having experienced this distorted sense of reality. Therefore, episodes of depersonalization/derealization appear, among others, to help an individual maintain their mental balance. Traumatic events and intense emotions experienced in one's body can transform psychological suffering into physical pain [3, 29].

## Purpose of the research

Having taken into account all of these factors, the purpose of the study was to analyze the relationships between the following variables: the severity of depressive symptoms; the feelings towards one's body; dissociation; and the number and type of traumatic life events. The literature does not present any unambiguous stance on various correlates between these variables among self-mutilating adolescents who are

psychiatrically hospitalized. Rather than intended to verify certain theoretical assumptions, our research studies were exploratory in nature, therefore our research question was: do any relationships exist between the tested clinical variables, and if so, what are they and how strong are they?

## Study group

The study was conducted in the Adolescents Ward at the Prof. Tadeusz Bilikiewicz Regional Psychiatric Hospital in Gdansk, and in the Psychiatric Ward for Adolescents and Secure Forensic Psychiatric Ward for Juveniles at the Stanisław Kryzan Psychiatric Hospital in Starogard Gdanski. The study was approved by the Ethical Committee for the Research Projects of the Institute of Psychology of University of Gdansk (No. 10/2015). All subjects were explained the study procedure prior to signing informed consents. Consents from the caregivers of the subjects were also obtained (according to the Polish law).

The inclusion criteria for the study group was making deliberate self-harm. A sample consisted of 60 psychiatric inpatients aged 13–17 ($M$ = 15.48, $SD$ = 1.19), including 51 girls (85%) and 9 boys (15%). More than a half (55%) were diagnosed with a mixed disturbance of emotions and conduct, 23.5% with depressive behavior disorders, and 10% were diagnosed with a depressive episode. Another 5% were diagnosed with a bipolar disorder, 1.1% with adjustment disorders, 1.1% – ADHD, 1.1% with PTSD, and in case of 1.6% of the patients a diagnosis was made of abnormal personality development and eating disorders.

The majority of participants (68%) attended junior secondary schools, the remaining 32% were students of general secondary schools. As far as the place of residence is concerned, the examined group can be equally divided into a subgroup of persons coming from small towns (30% of whom were country dwellers, 20% lived in small towns of less than 50,000 inhabitants), and a subgroup of those coming from major urban centers (16.7% of whom lived in towns of 51,000–100,000 inhabitants, 10% in towns of 101,000–300,000 inhabitants, and 23.3% in cities of 301,000–500,000 inhabitants).

Education levels of mothers and fathers were comparable for all participants. The largest group was made up of parents who finished vocational schools – 33.3% of all mothers and 50% of fathers belonged in this group. 26.7% of mothers and 21.7% of fathers had elementary education. 25% of women and 20% of men graduated from secondary schools. Parents with higher education degrees formed the least numerous group: 15% of all mothers and 8.3% of fathers belonged here.

The socio-demographic survey also probed each individual's current family situation. 30% of patients (the largest group) were brought up in complete families. 21.7% of participants were residents of social and behavioral facilities. 18.3% of adolescents lived in single parent households as a result of earlier divorce. 16.7% of adolescents were brought up in reconstructed families, and 6.7% were taken care of by foster families.

3.3% of examined individuals experienced the loss of a parent or a legal separation of caretakers. 88.3% of patients had siblings. In that group, 35% had either a sister or a brother, 15% were brought up with two siblings, 16.7% with three, and 21.7% with more than three siblings. 66.7% of adolescents described the family's financial situation as good, 18.3% as bad, and the remaining 15% as neither good nor bad.

## Research Tools

1. Medical records and an inquiry form asking for a set of personal data, such as: gender, age, school type, place of residence, parents' education level, number of siblings, family and financial situation, as well as whether the interviewee sought any psychological help in the past.
2. The Feelings Towards the Body Questionnaire, constructed on the basis of S. Tomkiewicz's description [30]. It tests whether biological changes that a young person's body undergoes are accepted. The questionnaire items describe feelings towards one's own body. After analyzing all items, the test's internal consistency as measured with Cronbach's alpha was 0.891.
3. The Child Depression Inventory (CDI) by M. Kovacs [31] is a commonly used method for measuring depression in children aged 7–17. Many research studies have confirmed this scale to be very stable. The reliability coefficients range from 0.82 to 0.66. Craighead et al. (1998) built a six-factor model of depression [32]. As suggested by this model, CDI comprises six subscales: acting out (externalizing), dysphoria, self-depreciation, school problems, social problems, biological dysregulation.
4. C. Scharfetter's Ego-Psychopathology Scale (1995; as cited in: [33]) is a clinical method used to measure disturbances in experiencing the Self. The author believes that an individual sense of self and self-awareness of the Self plays out on five dimensions, and consequently he singled out five psychopathological constructs, included in the test's subscales: vitality (a sense of existence as a living being, not dead or torpid); activity (perceiving oneself as a human being capable of guiding one's own life, thoughts, feelings and actions); consistency (a sense of internal integrity, harmonious continuity of one's life, experiencing oneself as a coherent entity, with both the body and the mind having some kind of order); demarcation (experiencing oneself as an entity separate from the surrounding reality and its components, being convinced about the existence of borders between Self and "not-Self", "mine" and "not-mine"); identity (being aware of one's self and being able to identify oneself in one's personal, physiognomical, biographical and sexual aspect).

Any deviations from the norm within the five above-mentioned areas manifest through a varied symptomatology. Serious disturbances in experiencing one's vitality may be indicative of dissociation. This kind of "suspending" both one's awareness and the fundamental sense of being a living organism, has great impact on how other

dimensions of the Self operate. Under such conditions an individual feels the need to regain a sense of themselves and their vitality, often through self-injury. Self-inflicted injuries are also the result of distorted perception of body image and losing a sense of well-marked body boundaries – these are characteristic of disturbances in consistency of the Self [34]. What is more, pathological experiencing of the Self, understood as a weakened sense of control over one's body and separating thoughts from actions, is common in people who self-mutilate.

The classifications DSM and ICD formulations originate in Janet's conceptualization of dissociation, which he termed mental disintegration (*désagrégation mentale*) (1889, as cited in: [35]). Moreover, like many clinicians, C. Scharfetter adopted in his research Janet's dissociation theory (1988) as the most fundamental (apart from E. Bleuler's concept) cause of etiopathogenesis of schizophrenia, while schizophrenia was recognized as the most serious manifestation of dissociative disorders, i.e., fragmentation, and even of destroying ego/self (1999). Therefore, in the present studies we treated disturbances in experiencing the Self as a measure of severity of dissociative symptoms. When Scharfetter carried out his study, he examined a total of 552 patients with diagnosed schizophrenia, and groups of patients suffering from depression ($N = 87$) and borderline personality disorder ($N = 25$) [36]. The questionnaire's author's analysis demonstrated that the majority of patients received high scores across all theoretical dimensions. This confirms that the five theoretical constructs are highly compatible with empirical facts, which in turn provides evidence that the questionnaire is of high validity. The analysis of internal consistency proved the reliability coefficient to be very high (Cronbach's alpha = 0.93) [33]. For individual subscales (dimensions) consistency values were only slightly lower (0.80; 0.84; 0.75; 0.67; and 0.69 respectively).

## Results

The first step in the analysis was to provide descriptive statistics for the collected data (Table 1).

Table 1. **Examined clinical variables – descriptive statistics**

| Variables | | Mean *(M)* | Standard Deviation *(SD)* | Min. | Max. |
|---|---|---|---|---|---|
| Depression | Externalizing | 1.32 | 1.17 | 0 | 4 |
| | Dysphoria | 4.15 | 2.79 | 0 | 11 |
| | Self-depreciation | 7.18 | 3.62 | 0 | 14 |
| | School problems | 1.73 | 1.26 | 0 | 4 |
| | Social problems | 2.38 | 1.97 | 0 | 8 |
| | Biological dysregulation | 2.93 | 1.85 | 0 | 7 |
| | Total score | 19.70 | 9.79 | 1 | 40 |

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| | | | | | |
|---|---|---|---|---|---|
| Feelings Towards the Body | Total score | 23.53 | 11.47 | 0 | 44 |
| Dissociation | Vitality | 8.70 | 6.53 | 0 | 24 |
| | Activity | 5.28 | 5.22 | 0 | 20 |
| | Consistency | 8.45 | 7.00 | 0 | 25 |
| | Demarcation | 5.03 | 4.74 | 0 | 18 |
| | Identity | 6.53 | 4.61 | 0 | 21 |
| | Total score | 34.00 | 23.92 | 0 | 91 |

For the Child Depression Inventory (CDI), a score above 11 points indicates mild depressive symptoms, and a score above 19 points is indicative of severe depression [31]. In this study an overall outcome suggests severe depression among hospitalized adolescents. However, after comparing these norms with the data obtained in more advanced analyses concerning the functions of self-inflicted injury (see: our next article in "Psychiatria Polska" *Deliberate self-injury functions and their clinical correlates among adolescent psychiatric inpatients*), we can conclude that more than half of the respondents (58.3%; $N = 35$) reported severe depressive symptoms, while the rest was characterized by either moderate (20%; $N = 12$) or mild symptoms (21.7%; $N = 13$). When compared with unpublished studies carried out by the first author of this article on feelings towards the body among female students of junior and general secondary schools ($N = 130$), a twelve-point difference in the scores can be found (compared with the whole self-mutilating group analyzed in the present study). Next, the results obtained by the examined adolescents in dissociation symptoms rank them between adult (mean age 47 years) patients suffering from depression ($X = 23.7$) and those (mean age 37 years) diagnosed with schizophrenia ($X = 42.3$). Specifically, disturbances in vitality are slightly more intense than in patients with schizophrenia ($X = 7.7$), disturbances in cohesion ($X = 9.6$) and identity ($X = 8.0$) are very close to the results of patients with schizophrenia, and disturbances in activity ($X = 4.5$) and demarcation ($X = 4.3$) are slightly more intense than in patients with depression [33].

Mindful of the issues covered in the present study, qualitative analysis of the adolescents' negative life experiences was also carried out (Table 2).

Table 2. **Negative life events among the participants**

| Type of negative life events | No. of examined individuals | % of examined individuals |
|---|---|---|
| Parent's divorce | 32 | 53.3 |
| Suicide attempt in the family | 10 | 16.7 |
| Loss (death) of a parent | 7 | 11.7 |
| Loss of a family member | 12 | 20 |

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| | | |
|---|---|---|
| Loss of a close person (not a family member) | 4 | 6.7 |
| A parent with an alcohol problem | 42 | 70 |
| A different family member with an alcohol problem | 10 | 16.7 |
| Drug abuse by parents | 4 | 6.7 |
| Drug abuse by other family members | 2 | 3.3 |
| Physical abuse by parents/siblings | 36 | 60 |
| Physical abuse by more distant family members | 4 | 6.7 |
| Physical abuse by non-family member | 11 | 18.3 |
| Emotional neglect by parents | 47 | 78.3 |
| Emotional neglect by more distant family members | 16 | 26.7 |
| Emotional neglect by non-family members | 13 | 21.7 |
| Emotional abuse by parents | 30 | 50 |
| Emotional abuse by more distant family members | 3 | 5 |
| Emotional abuse by non-family members | 17 | 28.3 |
| Sexual harassment by parents/siblings | 4 | 6.7 |
| Sexual harassment by more distant family members | 2 | 3.3 |
| Sexual harassment by non-family members | 9 | 15 |
| Sexual abuse by parents/siblings | 3 | 5 |
| Sexual abuse by more distant family members | 2 | 3.3 |
| Sexual abuse by non-family members | 10 | 16.7 |
| Witnessing traumatic events of others | 12 | 20 |
| A mentally ill parent | 8 | 13.3 |

Generally speaking, as far as negative life events are concerned, 36.7% of examined individuals experienced a loss of a close person. As much as 86.7% of adolescents suffered from emotional negligence, and 66.7% were emotionally abused. 71.7% of adolescents experienced physical abuse, 25% – sexual abuse, and 21.7% fell victim to broadly defined sexual harassment.

We also gathered data on the number of suicide attempts made by the participants. 33.3% of adolescents attempted suicide once, the same percentage (33.3%) never tried to take their own life. Those who attempted suicide twice made up 13.3% of the sample, while the remaining 20% tried to commit suicide three times or more.

86.7% contacted a psychologist at least once in the past, the remaining 13.3% never received psychological care.

## Analysis of the interaction between clinical variables

In order to answer the research question, whether all the clinical variables are interrelated, a correlation analysis was performed (using Pearson's r coefficients) (Tables 3–8).

Table 3. **The relationship between feelings towards the body and severity of depressive symptoms**

| Feelings towards the body | Depression | | | | |
|---|---|---|---|---|---|
| | Dysphoria | Self-depreciation | Social problems | Biological dysregulation | Total |
| My body makes me happy | -0.524** | -0.661** | -0.432** | -0.676** | -0.674** |
| My body feels alien to me | 0.265** | 0.518** | 0.321* | 0.567** | 0.515** |
| I find my body attractive | -0.341** | -0.519** | -0.392** | -0.475** | -0.511** |
| My body scares me | 0.437** | 0.625** | 0.560** | 0.570** | 0.630** |
| I like my body | -0.449** | -0.662** | -0.409** | -0.573** | -0.636** |
| I feel emotionally attached to my body | -0.408** | -0.578** | -0.443** | -0.582** | -0.599** |
| I detest my body | 0.396** | 0.579** | 0.443** | 0.554** | 0.591** |
| My body worries me | 0.293* | 0.471** | 0.383** | 0.489** | 0.501** |
| My body shames me | 0.368** | 0.519** | 0.434** | 0.487** | 0.524** |
| Total | 0.420** | 0.647** | 0.505** | 0.640** | 0.655** |

* $p < 0.05$; ** $p < 0.01$

The results indicate fairly strong or moderate correlations between feelings towards the body and severity of depressive symptoms (Table 3). Higher levels of depressive symptoms strongly correlate with negative feelings towards the bodily aspect of oneself. When these uncomfortable sensations intensify, they are followed by an increase in the severity of depression in the form of dysphoria, self-depreciation, social problems and biological dysregulation. Important relationships can be seen between self-depreciation and intensified experiences of dread, dissatisfaction and hostility towards the body. The strongest link exists between dissatisfaction with one's physicality and biological dysregulation.

Table 4. **Relationships between feelings towards the body and dissociation**

| Feelings towards the body | Dissociation | | | | |
|---|---|---|---|---|---|
| | Vitality | Activity | Consistency | Demarcation | Identity |
| My body makes me happy | -0.367** | -0.368** | -0.405** | -0.364** | -0.315* |
| My body feels alien to me | 0.229 | 0.293* | 0.311* | 0.251 | 0.401** |

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| | | | | | |
|---|---|---|---|---|---|
| My body scares me | 0.332** | 0.345** | 0.428** | 0.338** | 0.373** |
| I like my body | -0.358** | -0.383** | -0.469** | -0.383** | -0.279* |
| I feel emotionally attached to my body | -0.306* | -0.259* | -0.380** | -0.317* | -0.261* |
| I detest my body | 0.343** | 0.294* | 0.453** | 0.331** | 0.309* |
| My body worries me | 0.178 | 0.23 | 0.323** | 0.25 | 0.344** |
| My body shames me | 0.25 | 0.247 | 0.395** | 0.233 | 0.357** |
| Total | 0.281* | 0.315* | 0.433** | 0.322* | 0.384** |

* $p < 0.05$; ** $p < 0.01$

There is a low to moderate correlation between feelings towards the body and dissociation (Table 4). Higher intensity of disturbances within the five dimensions is accompanied by an increase in negative feelings towards the body, such as a sense of dread, aversion, dissatisfaction, hatred, and lack of emotional attachment. The greater the dysfunction in cohesion and identity, the more alien the body feels, and the more one suffers from shame and anxiety associated with it.

Table 5. **Relationships between feelings towards the body and negative life events**

| Feelings towards the body | Negative life events | | |
|---|---|---|---|
| | Physical abuse | Emotional abuse | Sexual harassment |
| My body feels alien to me | 0.281* | 0.102 | 0.075 |
| My body scares me | 0.366** | 0.114 | 0.260* |
| It is hard for me to understand the changes my body undergoes | 0.242 | 0.301* | 0.075 |
| My body worries me | 0.338** | 0.078 | 0.087 |
| Total | 0.319* | -0.029 | 0.096 |

* $p < 0.05$; ** $p < 0.01$

Correlation values between feelings towards the body and negative life events indicate moderate or weak relationships (Table 5). Greater frequency of experiencing episodes of physical abuse correlates with higher levels of negative feelings towards the body, particularly with more intensely experienced alienation, dread and anxiety because of one's physicality. With an increasing number of episodes of emotional abuse, the changes one's body undergoes become more and more difficult to understand. And when the number of episodes of sexual harassment increases, what follows are the feelings of dread associated with one's body.

Table 6. **Relationships between the severity of depressive symptoms and dissociation**

| Depression | Dissociation | | | | | |
|---|---|---|---|---|---|---|
| | Vitality | Activity | Consistency | Demarcation | Identity | Total |
| Dysphoria | 0.466** | 0.418** | 0.488** | 0.489** | 0.432** | 0.542* |
| Self-depreciation | 0.352** | 0.331** | 0.361** | 0.400** | 0.286* | 0.409* |
| Social problems | 0.303* | 0.368** | 0.387** | 0.420** | 0.457** | 0.448* |
| Biological dysregulation | 0.371** | 0.432** | 0.403** | 0.366** | 0.322* | 0.448* |
| Total | 0.424** | 0.420** | 0.465** | 0.469** | 0.420** | 0.518* |

* $p < 0.05$; ** $p < 0.01$

As the correlation values between the severity of depressive symptoms and dissociation demonstrate, there is a moderate relationship between these two variables (Table 6). The more severe the depression symptoms are (as measured with a general score), the greater the disturbances become within all dimensions of dissociation. More intense dysfunction of each of them goes together with more severe depressive symptoms, manifested through dysphoria, self-depreciation, interpersonal problems and biological dysregulation.

Table 7. **Relationships between depressive symptoms and negative life events**

| Depression | Negative life events | |
|---|---|---|
| | Suicide attempt in the family | Physical abuse |
| Externalizing | 0.263* | 0.267* |
| Self-depreciation | 0.039 | 0.289* |
| Total | -0.005 | 0.289* |

* $p < 0.05$; ** $p < 0.01$

The analysis revealed a weak correlation between some negative life events and depressive symptoms (Table 7). Higher numbers of suicide attempts in the family can be linked to higher levels of depression manifested in externalizing, while experiencing physical abuse is associated with more intense externalizing behaviors, self-depreciation, and general depressive symptoms alike.

Table 8. **Relationships between dissociation and negative life events**

| Dissociation | Negative life events | |
|---|---|---|
| | Emotional abuse | Emotional neglect |
| Vitality | 0.267* | 0.209 |
| Activity | 0.285* | 0.230 |
| Total | 0.241 | 0.256* |

* $p < 0.05$; ** $p < 0.01$

The results show a weak correlation between dissociation and individual traumatic events (Table 8). Higher dissociations levels go together with suffering from more frequent emotional neglect. Experiencing emotional abuse is, in turn, linked to an increase in pathological experiencing of vitality and activity of the Self.

## Discussion

The reason for conducting empirical analysis was to test whether the severity of depressive symptoms, feelings towards the body, occurrences of dissociative states and experiencing negative life events are all linked through a network of relations. As of now, the literature on the subject provides relatively limited data. The obtained results confirm relatively few studies on the interdependence of the aforementioned variables and theoretical assumptions [3, 4, 6, 8–23, 26]. Our own findings show that the strongest relationships are the following: between dissociation and increased severity of depression symptoms and feelings towards the body; and between increased severity of depressive symptoms and feelings towards the body (Figure 1).

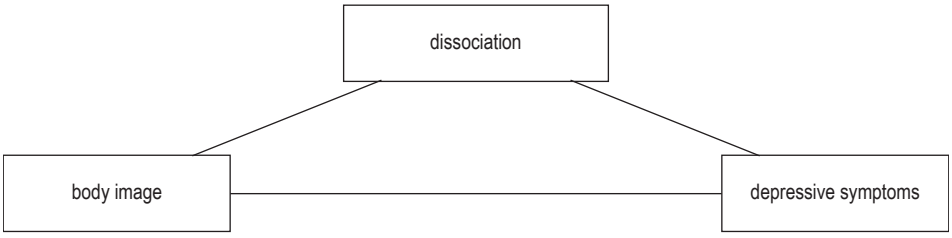


Figure 1. **Relationships between dissociation, feelings towards the body and severity of depressive symptoms in self-mutilating adolescents who are psychiatrically hospitalized**

As we proceed to discussing specific relations between the examined variables, let us consider the correlation between the severity of depressive symptoms and negatively perception of one's physicality. During the period of growing up, an individual's physical aspect and the changes within it become a focal point. Thus, adolescents pay close attention to how they look, and that significantly influences their attitude towards themselves and the others [37]. Many developmental challenges in this area, such as pubescence and burgeoning sexuality, affect both how one's body is perceived and how body image is formed. Accepting all natural, turbulent changes that a growing organism goes through is essential to build a stable body image [38]. Difficulties in accepting one's body that may arise from how changeable it is at that stage of life can become one of the probable reasons for more intense depressive symptoms. The causation may also go the other way: experiencing depressive symptoms may trigger negative feelings towards the body. The feelings most strongly associated with intense depressive symptoms, such as hate, dread, aversion

towards the body, dissatisfaction with one's appearance, are closely linked to self-depreciation, dysphoria, social problems and biological dysregulation. Depression among adolescents is also associated with high levels of subjective feeling of loneliness [39]. Feeling an emotional barrier in communicating with one's immediate surrounding is linked with having a negative image of oneself, and that may also involve physical aspects. Disapproving of one's body may therefore explain why variously manifested depression symptoms concur.

Also, having experienced a traumatic event negatively affects how one's bodily properties are perceived. It can be theorized that experiencing physical abuse leads to intensification of negative emotions, which in turn render one's body alien, terrifying, causing anxiety and aversion. It may also happen that self-injuring individuals perceive their own body as something that represents their torturer, who is the source of their suffering [3]. In such circumstances, the body which is being mutilated serves as a proxy object epitomizing all negative emotions that the victim expresses towards his or her wrongdoer. This way we can explain negative feelings towards the body, such as aversion or a sense of its alienness. Emotional abuse and sexual harassment also make it difficult to understand the changes in one's body, and are conducive to experiencing dread associated with it. Undeniably, a trauma may be considered to be a cause of distorted perception of one's body, manifested through hatred against it, a sense of losing control over it, or feeling that its boundaries are diffusing [40, 41]. This is how a traumatic experience becomes a factor that leads to self-mutilation, and dissociation is activated as an automatic defense response to stress caused by overwhelming traumas of the childhood period [29, 42].

Traumatic memories force their way back to consciousness when they are least expected, and the psyche is further destroyed by having to relive the suffering again. How this happens? An individual's psyche was already defenseless as early as when the trauma originally happened: the mind was not able to process and assimilate traumatic memories. The initial opportunity to assess the traumatic situation becomes either impossible or partially blocked and leads to reliving it again and again later in life [43]. Re-experiencing of traumas may happen in the form of self-inflicted injuries. Self-mutilation is often seen in terms of psychical trauma and its consequences. In this symbolic way an individual tries to distance themselves from the traumatic event, to keep the emotional chaos within them at bay. This phenomenon is called the trauma reenactment syndrome. Its characteristic feature is that within one's behavioral repertoire expression of self-destructive impulses is reinforced. These impulses come from the unconscious need to express one's mental suffering, and operate when recounting it verbally is not possible, e.g., due to losing the memory of the trauma [44]. For example, self-inflicted injuries that re-enact the trauma of sexual abuse become a way of treating one's body the very same way it was treated by others during one's childhood period [45]. This syndrome includes: hostility towards the body and a sense of being separated from it; keeping the instances of self-injury and traumatic events secret; occurrences of dissociative states; absence of psychological self-defense mechanisms;

establishing dysfunctional interpersonal bonds, coupled with no ability to maintain profound relationships.

The theory of repetition compulsion holds that acts of self-mutilation are unambiguously associated with an experienced trauma. When the victim decides, voluntarily and independently, to re-enact this experience again, it allows them to gain a sense of control over their lives and surrounding reality; to detach from inner emptiness and lifelessness; and to trigger negative emotions, such as anger and despair [46].

In general, based on clinical observations and our own research alike it can be stated that both self-mutilation and various mental disorders in adolescents have a history of experiencing traumas, therefore the relationship between analyzed disorders is not causal but a functional one, where all these phenomena are seen as ways of dealing with similarly difficult situations [47]. Accordingly, the analysis of self-injuries should be included in the diagnostic and therapeutic process, as an important element that contributes to the clinical picture of mental disorders among adolescents [48].

Discussing the relationship between dissociation and the severity of depressive symptoms requires more in-depth clinical interpretation. That self-mutilation and depression may coexist, is an issue not often described in the literature on the subject. Individuals with a history of self-harming (even those who have done so only for a short period in life) are more at risk of depression or its symptoms than persons without previous self-aggressive experiences [5]. The connection between self-injuries and depression is quite obvious, however, the direction of influence is not entirely clear, and neither is the cause-and-effect link between the two phenomena. Three interpretative approaches aim to clarify this problem. The first one emphasizes that depressive symptoms are of paramount importance and that they are in fact a reason behind self-mutilating. Depressive symptoms precede self-destructive acts, which provide ways to eliminate the problems that depressive states have produced [49]. As defined by the ICD-10 classification [50], a depressive episode is characterized by an absence of capacity to derive pleasure from actions and behaviors that used to provide it before. One's ability to focus is lowered, and persistent thoughts of death or suicide keep coming into one's head.

All these discomforts can be relieved precisely due to the functional aspects of self-injuries. Their role may be to protect an individual from attempting suicide (though we should bear in mind that two thirds of the group tried to take their lives at least once), to help focus one's psychological torment on physical pain or on getting out of the state of dissociation, torpidity and emptiness by generating new emotional reserves. With these mechanisms in operation, an individual experiencing depressive symptoms is able to cope with negative feelings and quickly reduce their intensity [49].

The second hypothesis claims the inverse relation to be true. It is likely that engaging in self-injuring behaviors brings forth depressive symptoms and intensifies them. Initially, self-destructive activity may not come from the necessity of affect regulation, but, e.g., from the need to establish relationships with one's peers. After an adolescent

inflicts injury upon him – or herself, accompanying feelings of anger or shame probably cause the depressive symptomatology to increase [49].

Finally, the last assumption holds that there is no causal link between depression and self-injuries. It postulates that they share an underlying risk factor (be it a genetic, cognitive or social one) – this is why they can occur together and both can intensify through this interaction, but none is a result of the other [49]. To sum up, the link between the two psychopathological cases is complex, complicated and not yet certain. The first hypothesis seems to be the most probable one. It argues that depression is a basis for self-mutilating behavior. That would explain the most fundamental and universal functional aspects of self-injuries as a way to self-regulate one's emotions (including breaking out of dissociative states).

The findings also point to a link between negative feelings towards the body and more intense dissociative symptoms among self-injuring adolescents. We can theorize that what drives these individuals is a desire to cut off from unpleasant feelings, by using exactly the mechanism of dissociation. As evidenced by the analysis, the strongest connection is one between consistency of the Self and the feelings towards the body. Disturbances within experiencing self-consistency are linked with anxiety, dread, aversion, hate, alienness of one's body and with being ashamed of one's physicality. It is possible that such unpleasant emotional states are regulated by means of blocking access to one's consciousness, by distancing oneself from what is emotional and by focusing on what is physical instead. Thanks to this dissociation an individual is able (even if only temporarily) to force out of consciousness this part of him – or herself that is unaccepted and causes psychological discomfort. Our observation that dissociation is linked with negative emotions towards the body is also corroborated by a strong correlation between more intense identity disorders and experiencing one's body as something alien. In this case, a sense of body alienation may make it difficult to integrate one's identity and to treat one's body as a coherent element of the Self.

Relationships between traumatic events and dissociation can be discussed in the following context. In order to prevent disruption of integrity, every available defense mechanism is activated, even the least adaptive ones – and it may be that for self-mutilating individuals they are the only ones possible and thus most adaptive. One of these mechanisms is dissociation, used against difficult events (negligence or emotional abuse) that a person had to deal with in the childhood period, and against a relationship with caretakers that was not strong or supportive enough. It becomes a method to isolate recurring bad thoughts and experiences.

Moreover, past incidents of physical abuse go together with more intense depressive symptoms, in particular self-depreciation. Physical violence victims may perceive themselves as worthless, and see their lot as getting what they deserve. Experiencing chronic violence constantly reinforces a victim's tendency to blame him – or herself for what happens [51]. Furthermore, people whose history involves traumatic experiences are less able to cope with stressful situations, they more often respond with fear and anxiety, and they are also characterized by greater susceptibility to depression [39].

Despite promising results, our research also has its limitations. So far it has not been possible to determine the direction of the relationship between all examined clinical variables. Additionally, the results we obtained are, no doubt, affected by many factors beyond the ones discussed. We should also consider a possibility that the results and the interaction between clinical variables are associated not only with self-injury, but also with other diagnosed mental disorders, contributing to their clinical picture.

## Conclusions

1. Among self-injuring adolescents who are psychiatrically hospitalized, there are mutual relations between traumatic events, dissociation, body image and the severity of depressive symptoms. Moreover, two thirds of the examined individuals attempted suicide, which indicates that various forms of direct self-destructive behaviors very often occur simultaneously. It also provokes reflection as to the conditions under which self-inflicted injury does (or does not) prevent suicide attempts.
2. The strongest links were found: between dissociation vis-a-vis the severity of depressive symptoms and the feelings towards one's body; and between the severity of depressive symptoms and the feelings towards one's body. Self-mutilation along with the interaction between examined clinical variables may form a self-destruction syndrome in various mental disorders among adolescents and contribute to clinical pictures of these disorders.

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