

**Theses of Doctoral (PhD) Dissertation**

**Borderline symptom profile and childhood  
traumatization**

by Katalin Merza MA

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UNIVERSITY OF DEBRECEN  
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# **Borderline symptom profile and childhood traumatization**

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The Examination takes place at the Department of Preventive Medicine, Faculty of Public Health, University of Debrecen, on the 21<sup>st</sup> January, 2019 at 11 am.

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The PhD Defense takes place at the Lecture Hall of Bldg. A, Department of Internal Medicine, Faculty of Medicine, University of Debrecen, on the 21st January, 2019 at 1 pm

## **INTRODUCTION**

One of the potential outcomes of childhood traumatization is borderline personality disorder (BPD), a well-known severe disorder in mental health care. Not every borderline patient has a history of childhood traumatization, but prior research confirmed that the prevalence of traumatized borderline patients is higher than the prevalence of non-traumatized borderline patients.

Current nosological systems' descriptive and phenomenological approach to classification do not contain etiological and psychodynamic aspects, therefore clinicians often fail to assess traumatic experiences of borderline patients. There is a serious possibility of underreporting of sexual abuse unless systematic efforts are made to obtain information. Furthermore, some victims fail to disclose their victimization because of embarrassment or the dissociation from the memory of a childhood history of severe physical and sexual abuse.

Among borderline patients, history of complex childhood traumatization is linked to increased symptom severity, higher comorbidity of other mental disorders and poorer psychosocial functioning. These findings underscore the importance of investigating childhood experiences of borderline patients.

The role of childhood traumatization in the etiology of borderline personality disorder has been a focus of research for more than 30 years in North America and Western Europe, whereas in Hungary and in the European Post-Soviet states there have been no studies that have

investigated the role of traumatic childhood experiences in the development of BPD.

The purposes of this study were to assess retrospectively the self-reported experiences of childhood traumatization in Hungarian inpatients with a diagnosis of BPD, to determine which etiological factors are most strongly associated with the development of BPD, and to reveal the relationship between childhood traumatization and borderline symptoms.

## **AIMS OF THE STUDY**

### **(1) Aims regarding childhood traumatization**

- We aimed to assess self-reported experiences of childhood traumatization in inpatients with a diagnosis of borderline personality disorder.
- We would like to reveal the association between childhood traumatization and borderline personality disorder.

### **(2) Aims regarding dissociation**

- We would like to assess the severity and frequency of dissociative experiences of borderline patients.
- The other aim was to reveal the association between childhood traumatization and dissociation.

### **(3) Aims regarding impulsivity**

- We would like to assess the severity of impulsiveness of borderline patients.
- The other aim was to reveal the association between childhood traumatization and impulsiveness.

### **(4) Aims regarding suicidal behavior**

- Our aim was to explore the prevalence of suicidal behavior in three groups: borderline patient, borderline patients with major depressive disorder and depressed control subjects.
- We would like to reveal the predictors of suicidal behavior.

### **(5) Aims regarding nonsuicidal self-injurious behavior**

- Our aim was to assess the prevalence and onset of nonsuicidal self-injurious behavior among borderline patients.
- We would like to identify groups of borderline inpatients who engage in different amounts of nonsuicidal self-injury (NSSI), and explore the characteristics of these groups regarding the frequency and onset of nonsuicidal self-injury; the severity of dissociation and impulsivity; and the history of childhood traumatization.
- The last aim was to reveal the predictors of nonsuicidal self-injurious behavior.

## **METHODS**

171 inpatients were recruited from eight Hungarian psychiatric hospitals. All patients were initially screened to determine that they 1) were between the ages of 18 and 50 years 2) had been given a definite or a probable clinical diagnosis of borderline personality disorder or major depressive disorder by a senior psychiatrist. Participants were excluded if they had current symptoms or a history of 1) major psychotic disorder or 2) cognitive impairment. The Hungarian version of Structured Clinical Interview for DSM-IV Axis I and Axis II disorders (SCID-I-II) was administered to confirm the diagnosis of borderline personality disorder and major depressive disorder (MDD). 18 of 171 participants were eliminated by the diagnostic interview, because they were found to have disorders excluded from this study, as above, or they met less than five BPD diagnostic criteria. Patients who met at least five DSM-IV criteria for BPD on the SCID-II were included in the borderline cohort. Patients who met the diagnosis of major depressive disorder without personality disorders were the non-borderline depressed controls. Healthy controls were recruited for the study. Out of a pool of 62 controls 51 were free of psychiatric disorders, as assessed by the SCID.

The final sample consisted of 204 participants, of whom 80 psychiatric inpatients were in the BPD group, 73 psychiatric inpatients were in the depressed comparison group and 51 people were in the healthy comparison group.

## **Measures**

Experiences of childhood traumatization were assessed by the 6 subscales of the *Traumatic Antecedents Questionnaire* (TAQ). These subscales cover neglect, separation, emotional abuse and physical abuse by a caretaker or family member, sexual abuse by an adult and witnessing of domestic violence. These adverse experiences were assessed at four different developmental periods: early childhood (0-6 years), latency (7-12 years), adolescence (13-18 years), and adulthood (over 18 years).

In addition to the TAQ, the Sexual Abuse subscale of the *Early Trauma Inventory* (ETI) was used to assess childhood experiences of sexual abuse in more detail. The ETI gathers information about frequency, age at onset, relationship to the perpetrator and nature of sexual abuse.

Dissociation was assessed by the Hungarian version of *Dissociation Questionnaire* (DISQ-H). The DISQ-H contains 4 subscales: identity confusion/fragmentation; loss of control over behavior, thoughts, and emotions; amnesia; absorption.

Barratt Impulsiveness Scale (BIS) was used to assess personality/behavioral construct of impulsiveness. The subscales of the BIS cover attention, cognitive instability, motor impulsiveness, perseverance, self-control and cognitive complexity.

Nonsuicidal self-injury was assessed by the Hungarian clinical version of Ottawa Self-Injury Inventory (OSI). OSI is a self-reporting measure

which gathers information about the onset, frequency, severity, reasons and methods of NSSI and the frequency of suicide attempts. Demographic data and treatment history were assessed by a questionnaire created by the authors.

### **Statistical Analyses**

The statistical analyses were performed by the SPSS statistical package version 20.0.

Between-group comparison involving continuous data were computed by means of one-way analysis of variance. Between-group comparison involving categorical data were carried out by Chi-square tests. For quantitative variables group differences were tested using Kruskal-Wallis and Mann-Whitney U tests.

Two-step cluster analysis was carried out to discriminate the patients on the basis of the number of NSSI into groups. The analysis was based on one categorical variable (whether the patient reported any NSSI or not) and one continuous variable (the number of NSSI).

Logistic regression analyses and mediation analyses were used to test the research questions regarding the relationship between childhood traumatization and borderline symptoms.

A p value less than 0.05 was considered statistically significant.

## **RESULTS**

The final sample consisted of 204 participants, of whom 80 psychiatric inpatients were in the BPD group, 73 psychiatric inpatients were in



the depressed comparison group and 51 people were in the healthy comparison group. Statistical analysis revealed significant differences among the three groups ( $F = 49.42, p < 0.001$ ), the mean ages of the BPD group ( $30.5 \pm 10.87$  years) and of the healthy comparison group ( $33.6 \pm 8.71$ ) were significantly lower than of the depressed comparison group ( $44.3 \pm 5.91$  years). Chi-square test showed significant differences in marital status ( $\chi^2 = 88.72, p < 0.001$ ) and employment ( $\chi^2 = 130.1, p < 0.001$ ) among the groups, with borderline patients less likely to be married and more likely to be unemployed than comparison subjects. The groups were found to be similar in sex distribution, with all groups containing significantly more females than males ( $\chi^2 = 0.43, p = 0.808$ ). There were no statistically significant differences among the groups for education ( $\chi^2 = 9.00, p = 0.061$ ).

### **Childhood traumatization**

Chi-square test indicated that the rates of childhood neglect ( $\chi^2 = 35.88, p < 0.001$ ), emotional abuse ( $\chi^2 = 34.36, p < .001$ ), physical abuse ( $\chi^2 = 51.58, p < 0.001$ ), sexual abuse ( $\chi^2 = 45.52, p < 0.001$ ) and witnessing trauma ( $\chi^2 = 45.02, p < 0.001$ ) were significantly higher in the BPD group than in the depressed and healthy control groups before the age of 18.

Furthermore significantly more borderline patients reported neglect ( $\chi^2 = 24.92, p < 0.001$ ), emotional ( $\chi^2 = 32.98, p < 0.001$ ), physical ( $\chi^2 = 45.04, p < 0.001$ ), sexual abuse ( $\chi^2 = 18.08, p < 0.001$ ), and witnessing trauma ( $\chi^2 = 41.24, p < 0.001$ ) before the age of 6.

We compared borderline and depressed patients who reported childhood sexual abuse with respect to the parameters of sexual abuse. A significantly higher percentage of borderline patients than depressed comparisons reported childhood sexual abuse perpetrated by a father/male caretaker ( $\chi^2 = 5.93, p = 0.015$ ). Moreover, the frequency of multiple perpetrators was also higher among BPD patients ( $\chi^2 = 9.27, p < 0.001$ ). The prevalence of oral sex ( $\chi^2 = 4.43, p = 0.035$ ), penetration ( $\chi^2 = 14.68, p < 0.001$ ) and incomplete penetration ( $\chi^2 = 5.49, p = 0.019$ ) was higher among borderline patients than among depressed patients. The prevalence of monthly regular sexual abuse was significantly higher among BPD patients than among depressed controls ( $\chi^2 = 5.77, p = 0.016$ ).

We calculated the number of categories of childhood traumatic events to which a person was exposed during childhood. The groups were compared on the median numbers of cumulative trauma scores, and the statistical analysis revealed a large, significant difference among them ( $\chi^2 = 84.63, p < 0.001$ ). More specifically, the median numbers of cumulative trauma scores were 5 in the borderline group, 3 in the depressed group and the 1 in the healthy control group.

Logistic regression was carried out to determine the strongest predictors of BPD diagnosis. The highest odds ratio for predicting BPD diagnosis was found for childhood experiences of genital fondling (Exp(B) = 8.156, 95% CI = 2.48–26.84,  $p < 0.001$ ), followed by penetration (Exp(B) = 5.316, 95% CI = 1.15–24.54,  $p = 0.032$ ), intrafamilial physical abuse (Exp(B) = 4.083, 95% CI = 1.67–10.79,  $p$

= 0.002) and neglect ( $\text{Exp}(B) = 4.248$ , 95%CI = 1.56–10.69,  $p = 0.004$ ) by the caretakers.

### **Dissociation**

Patients with borderline personality disorder had significantly higher scores on the measure of dissociation than depressed control subjects ( $U = 1215.0$ ,  $p < 0.001$ ).

In the regression analysis that examined predictors of dissociation, a significant interaction was found between dissociation and cumulative trauma score ( $\beta = 0.342$ ,  $SE = 0.05$ ,  $t = 2.973$ ,  $p = 0.004$ ) and sexual abuse characterized by penetration ( $\beta = 0.326$ ,  $SE = 0.22$ ,  $t = 2.728$ ,  $p = 0.007$ ).

### **Impulsivity**

We found significantly higher scores on impulsiveness scale among borderline patients than among depressed control subjects ( $U = 1085.5$ ,  $p < 0.001$ ).

Linear regression analysis showed that sexual abuse ( $\beta = 0.30$ ,  $SE = 4.13$ ,  $t = 3.04$ ,  $p = 0.003$ ) and sexual abuse by a male perpetrator familiar to the patient ( $\beta = 0.22$ ,  $SE = 5.35$ ,  $t = 1.941$ ,  $p = 0.05$ ) are the significant predictors of impulsiveness.

### **Suicidal behavior**

To examine the suicidal behavior, the sample was divided into three groups: 1.) borderline patients without major depressive disorder diagnosis ( $n = 33$ ); 2.) borderline patients with comorbid major

depressive disorder diagnosis ('comorbid group') ( $n = 47$ ), and 3.) depressed control patients ( $n = 73$ ).

Significantly more borderline patients with comorbid MD diagnosis (88.7%) reported suicidal behavior than borderline patients without MD diagnosis (70.4%) and depressed control subjects (42.5%) ( $\chi^2 = 28.95$ ,  $p < 0.001$ ). The lifetime number of suicide attempts was significantly higher in the comorbid group ( $Mdn = 4$ ) than among borderline patients without MD diagnosis ( $Mdn = 2$ ) and among depressed control subjects ( $Mdn = 1$ ) ( $\chi^2 = 46.519$ ,  $p < 0.001$ ).

Linear regression analysis was carried out to reveal the relationship between suicidal behavior and childhood traumatization, dissociation, impulsivity and comorbid major depression diagnosis. The significant predictors of suicidal behavior were cumulative trauma score ( $\beta = 0.24$ ,  $SE = 3.41$ ,  $t = 2.58$ ,  $p = 0.011$ ), dissociation ( $\beta = 0.26$ ,  $SE = 1.13$ ,  $t = 2.25$ ,  $p = 0.026$ ) and impulsivity ( $\beta = 0.29$ ,  $SE = 1.76$ ,  $t = 2.07$ ,  $p = 0.040$ ). Furthermore, mediation analysis showed that impulsivity ( $\beta = 0.19$ ,  $p = 0.05$ , Sobel  $Z = 1.86$ ) and dissociation ( $\beta = 0.21$ ,  $p = 0.044$ , Sobel  $Z = 1.97$ ) play mediator roles between childhood traumatization and suicidal behavior.

### **Nonsuicidal self-injurious behavior**

Significantly more borderline patients (78.75%) than depressed control subjects (4.11%) reported self-injurious behavior ( $\chi^2 = 86.69$ ,  $p < 0.001$ ).

Lifetime number of self-injuries were significantly higher in the borderline group than in the depressed control group (15 vs. 2 acts,  $U = 21.00$ ,  $p = 0.023$ ). Furthermore, borderline patients started harming themselves at a significantly earlier age than the depressed patients (15 vs. 46 years,  $U = 0.00$ ,  $p < 0.001$ ).

To examine whether the number of NSSI could be used to distinguish groups of self-injurers, a two-step cluster analysis was carried out. Among self-injurers two groups were identified; in the first group ( $n = 44$ ) the mean number of lifetime instances of NSSI was 11.2 ( $\pm 9.1$ ), and in the second group ( $n = 19$ ) this number was 75.0 ( $\pm 28.4$ ). The second group of patients, engaged in extremely high numbers of NSSI, were defined as “super self-injurers”.

We assessed the severity of borderline psychopathology in the three groups. The Kruskal-Wallis test indicated significant differences among the groups for the three severity variables: the median numbers of comorbid DSM-IV Axis I diagnosis ( $\chi^2 = 28.70$ ,  $p < 0.001$ ), the DSM-IV BPD criteria ( $\chi^2 = 35.46$ ,  $p < 0.001$ ), and comorbid DSM-IV personality disorder diagnosis ( $\chi^2 = 14.41$ ,  $p < 0.001$ ) were higher in the super self-injuring group than in the moderate self-injuring and non-injuring groups.

In terms of age at onset of NSSI, we found significant differences ( $U = 241.0$ ,  $p = 0.008$ ) between the two self-injuring groups: those in the super self-injuring group began harming themselves at a mean age of 13.9 ( $\pm 3.8$ ) ( $Mdn = 14$ ) years, while those in the moderate group had begun harming themselves at a mean age of 17.8 ( $\pm 6.6$ ) ( $Mdn = 16$ ) years.

We compared the three groups (non-injurers, moderate self-injurers, super self-injurers) on overall rates of reported childhood traumatization. A Chi-square test revealed significant differences among the groups for sexual abuse ( $\chi^2 = 22.29, p < 0.001$ ) and witnessing trauma ( $\chi^2 = 18.85, p < 0.001$ ). The rates of these types of traumatization were the highest in the group of super self-injurers, and the lowest in the group of non-injurers.

Furthermore, a significantly higher percentage of super self-injurers than moderate self-injurers and non-injurers reported childhood sexual abuse perpetrated by a father/male caretaker ( $\chi^2 = 41.34, p < 0.001$ ), penetration ( $\chi^2 = 37.08, p < 0.001$ ), monthly regular sexual abuse ( $\chi^2 = 14.31, p = 0.001$ ), and abuse before the age of 6 ( $\chi^2 = 41.28, p < 0.001$ ).

The groups were compared on the median numbers of cumulative trauma scores, and the statistical analysis revealed a large, significant difference among them ( $\chi^2 = 19.89, p < 0.001$ ). More specifically, the median numbers of cumulative trauma scores were 3 in the non-injuring group, 5 in the moderate self-injuring group and the highest, 6 in the super self-injuring group.

We examined the impulsiveness and dissociation in the three groups, and found that the super self-injurers gave significantly higher scores on DISQ-H ( $\chi^2 = 29.62, p < 0.001$ ) and BIS ( $\chi^2 = 24.84, p < 0.001$ ) than moderate self-injurers and non-injurers.

Linear regression analysis was carried out to reveal the relationship between nonsuicidal self-injurious behavior and childhood traumatization, dissociation and impulsivity. The significant

predictors of the NNSI were the cumulative trauma score ( $\beta = 0.21$ ,  $SE = 6.70$ ,  $t = 2.31$ ,  $p = 0.023$ ) and dissociation ( $\beta = 0.21$ ,  $SE = 5.79$ ,  $t = 2.18$ ,  $p = 0.031$ ). In the model impulsivity had a predictive value but this result was not significant ( $\beta = 0.14$ ,  $SE = 2.56$ ,  $t = 1.89$ ,  $p = 0.062$ ). Furthermore, mediation analysis showed that impulsivity ( $\beta = 0.13$ ,  $p = 0.007$ , Sobel  $Z = 2.69$ ) and dissociation ( $\beta = 0.20$ ,  $p < 0.001$ , Sobel  $Z = 3.55$ ) play mediator roles between childhood traumatization and self-injurious behavior.

## **DISCUSSION**

### **Childhood traumatization**

The primary aim of this study was to explore the relationship between childhood traumatic experiences and BPD.

Our results suggest that self-reported childhood history of abuse and neglect are both common and highly discriminating for borderline patients in Hungary as well. We have found that adverse childhood experiences, including neglect, emotional abuse, physical abuse, sexual abuse and witnessing trauma were more prevalent among borderline patients than among depressed and healthy comparisons in all three developmental periods. Furthermore, the higher cumulative trauma score in the borderline group shows that they seemed to come from multi-abusive family environments.

Our results show that borderline patients compared to depressed patients have reported the most severe forms of sexual abuse. More

specifically, severely impaired borderline inpatients in our study reported more incest (49%), monthly regular abuse (40%), multiple perpetrators (42%), abuse before the age of 6 (13%) and penetration (76%) than depressed controls.

We have found that sexual abuse, intrafamilial physical abuse and neglect by caretakers were the strongest predictors of borderline diagnosis. These findings are consistent with the findings of North American and European studies and suggest that, beside sexual abuse, neglect is an important factor in the development of BPD. On the other hand, physical abuse was a predictor of borderline etiology in Hungary and in the Far East but not in Western studies. These results suggest that childhood sexual abuse and neglect can be seen as a part of a cross-cultural etiology of BPD. Our study fit into the range of studies, which highlight the association between childhood traumatization and the development of BPD in countries with different sociocultural backgrounds. As for the type of childhood traumas, like Chinese study, our findings also give weight to the role of physical abuse in the development of BPD. In societies with authoritarian traditions corporal punishment usually has a more major role in child rearing. Hungary and China both being countries with only relatively recent Post-Soviet histories, parents may not consider corporal punishment as abuse and, therefore, the use of physical force may be more prevalent. Furthermore, patients can easier report experiences of physical abuse than sexual abuse in a society, where sexual abuse may be still a taboo topic.



### **Suicidal behavior**

Comorbidity of borderline personality disorder and major depressive disorder was associated with an increased number of suicide attempts, consistent with prior studies that have also noted increased seriousness of attempts in patients with these comorbid disorders.

The lifetime number of suicide attempts was independently predicted by the cumulative trauma score, impulsivity and dissociation across all three diagnostic groups. In contrast of previous reports the presence of depressive disorder was not predictive of suicide attempts. Furthermore, mediation analysis revealed that impulsivity and dissociation are the links between childhood traumatization and suicidal behavior. The conceptualization of suicidality based on the observation of depressed patients emphasizes that hopelessness and the lack of problem solving increase the risk of suicidal behavior in patients with major depressive disorder. In contrast of these findings, our results shed light on another developmental way of suicidal attempts in borderline patients, namely childhood traumatization, dissociation and impulsiveness. Whereas depressed patients' suicidal attempts are characterized by objective planning, borderline patients' suicidal attempts are the results of impulsive decision making and the intent of immediate relief from negative self-states.

### **Nonsuicidal self-injurious behavior**

In this study, patients with borderline personality disorder differed from the depressed patients in having an earlier onset of nonsuicidal self-injuries, and a higher lifetime number of self-injurious acts.

We identified a subgroup of borderline patients engaged in extremely high numbers of NSSI, called super self-injurers. This group consisted of 23% of the sample, with a 75 mean number of NSSI.

We found that the borderline psychopathology was more severe in the super self-injuring group than in the moderate self-injuring and non-injuring groups. More specifically, super self-injurers met more BPD criteria, and had nearly double the DSM-IV Axis I and personality disorders of the other two groups.

The group of super self-injurers began to self-injure at a very young age. While the onset of NSSI among moderate self-injurers most commonly occurred in late adolescence (18 years), among the super self-injurers it occurred 4 years earlier, in early adolescence (14 years).

Adverse childhood experiences, including sexual abuse and witnessing domestic violence, were more prevalent among super self-injurers than among moderate self-injurers and non-injurers in all three developmental periods. Furthermore, the higher cumulative trauma score in the super self-injuring group shows that they seemed to come from multi-abusive family environments. Super self-injurers reported experiences of the most severe forms of sexual abuse, characterized by incest, penetration and repetitive abuse.

Super self-injurers were more impulsive and reported more severe dissociative experiences, which is consistent with the results of previous studies.

We have found that childhood traumatization, particularly higher cumulative trauma score, dissociation; and impulsivity were highly

predictive of the number of NSSI. These findings are consistent with the findings of earlier studies, suggesting that sexual abuse and its parameters are important etiological factors in the development of NSSI among borderline inpatients, and that exposure to multiple traumas, particularly in early childhood, can lead to severe pathology. Mediation analysis revealed that dissociation and impulsivity are the links between childhood traumatization and NSSI. Our findings suggest that dissociation generally stems from a childhood history of complex traumatization, and contributes to the use of NSSI to prevent mental disintegration and disconnection. NSSI can help borderline patients control unpleasant self-states, and provide relief from negative emotions, dissociation and depersonalization without the consideration of the long term consequences of the act.

Our study suggests that the frequency of nonsuicidal self-injury in borderline inpatients can be regarded as an indicator of clinically relevant anamnestic data (namely, the severity, complexity and onset of childhood traumatization), and of the severity of current borderline psychopathology. Furthermore, we have found that NSSI data, which is relatively easy to obtain, has a far-reaching potential to alert clinicians to the need to assess inpatients' underlying condition and probable childhood experiences. We hope that our results will encourage clinicians to assess not just the presence or absence of NSSI, but also the lifetime frequency, onset and other characteristics of these behaviors, as we now know that they are likely to point to further important, clinically- relevant information.

## **MAIN STATEMENTS AND RESULTS**

To the best of our knowledge, in Hungary and in the European Post-Soviet states there have been no studies that have investigated the role of traumatic childhood experiences in the development of borderline personality disorder. The primary aim of this study was to explore the relationship between childhood traumatic experiences and borderline symptoms, such as dissociation, impulsivity, suicidal behavior and nonsuicidal self-injurious behavior in Hungary.

The sample consisted of 204 subjects, 80 borderline inpatients, 73 depressed control patients and 51 healthy control subjects.

Five major findings emerged from this study.

First, in this study between group comparisons revealed that borderline patients were exposed to more severe traumatic childhood experiences, such as multiple traumas and early, intrafamilial sexual abuse, than depressed and healthy controls.

Second, every symptom which was examined in this study shows that the psychopathology of borderline patients is more severe than the psychopathology of depressed patients. More specifically, borderline patients reported pathological dissociation, more severe impulsiveness, and a higher number of self-injurious acts and suicide attempts.

Third, comparisons in the borderline group suggest that the frequency of nonsuicidal self-injury in borderline inpatients can be regarded as an indicator of the severity and complexity of childhood

traumatization, of the severity of dissociation and impulsivity, and of the severity of current borderline psychopathology.

Fourth, we have found that childhood traumatization, particularly early sexual abuse and the higher cumulative trauma score were highly predictive of pathological dissociation and impulsivity.

Fifth, our study revealed that impulsivity and dissociation are important links between early maladaptive experiences and self-injurious and suicidal behavior. These findings suggest that clinicians have to consider another factors, apart from depression and hopelessness, in the development of suicide attempts in borderline patients.

This study will, hopefully, encourage Hungarian clinicians to assess the childhood experiences of borderline patients more thoroughly, bringing the high likelihood of childhood abuse to clinicians' attention. A better appreciation of the possible childhood abuse experiences of borderline patients may, hopefully, help clinicians view them as survivors of abuse with specific treatment needs.



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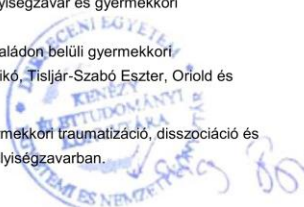
Candidate: Katalin Merza  
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### List of publications related to the dissertation

1. Merza, K., Papp, G., Molnár, J., Kuritárné Szabó, I.: Characteristics and development of nonsuicidal super self-injury among borderline inpatients.  
Psychiatr. Danub. 29 (4), 480-489, 2017.  
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### List of other publications

3. Kuritárné Szabó, I., Merza, K.: A szexuális bántalmazás és a borderline tünetprofil összefüggései.  
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The Candidate's publication data submitted to the iDEa Tudóstér have been validated by DEENK on the basis of Web of Science, Scopus and Journal Citation Report (Impact Factor) databases.

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### **International presentations related to the dissertation**

**Merza K.**, Papp G., Harmatta J., Kuritárné Szabó I.: Childhood traumatization and trait impulsiveness among borderline patients with and without substance use disorder. Poster presentation, International Conference on Dual Disorders. Barcelona, 2013. október

**Merza K.:** Childhood Traumatization in the Etiology of Borderline Personality Disorder among Hungarian Patients. Oral presentation, Congress of the International Society for the Study of Personality Disorders. Koppenhága, 2013. szeptember,

**Merza K.**, Harmatta J., Kuritárné Szabó I.: Self-mutilation as a behavioural addiction in borderline personality disorder. Oral presentation, 1st International Conference on Behavioral Addictions. Budapest, 2013.március 11-2013.március 12.

**Merza K.:** Childhood traumatization and self-mutilative behaviour in borderline personality disorder. Oral presentation, V. Nemzetközi Román-Magyar Pszichiátriai Konferencia. Csíkszereda, 2012. június

### **National presentations related to the dissertation**

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