

# Impact of Early Maladaptive Schemas in the Development of Borderline Personality Disorder

Dana Cimpan,  
Aurel Nirestean, Lukacs Emese, Alina Radu

University of Medicine and Pharmacy, Psychiatric Clinic 2, Tg. Mures,  
Romania

# Introduction

- **Borderline Personality Disorder (BPD)** is a constant target of interest to psychiatrists and psychotherapists in last decades.
- BPD represents
  - 19% of in-patient psychiatric patients
  - 11% of the outpatients ones
  - 30-60% of personality disorders (APA, 2000).
  - 0.7 to 2 % of the general population (Fonseca - Pedrero, 2011).
- There are no data available on the prevalence of BPD in Romania.
- BPD patients frequently access medical and surgical services consuming significant human and material resources.
- Beliefs, cognitive schemas and attitudes are important in the development and maintenance of BPD (Geiger, Peters et al, 2013).
- **Schema Therapy** elaborated by Young and colleagues, 2003 for treating severe personality disorders as BPD is based on the concept of **Early Maladaptive Schemas (EMS)**.

# Methodology

## Hypotheses

- First study investigates EMS enabled in BPD patients (n=75) compared to a mentally healthy sample composed of sixth year students of Medicine Faculty (n=40), respectively a clinical trial consisting of Histrionic Personality Disorders patients (HPD) (n=40).
- The second study evaluates the correlations existing among EMS identified in BPD sample.

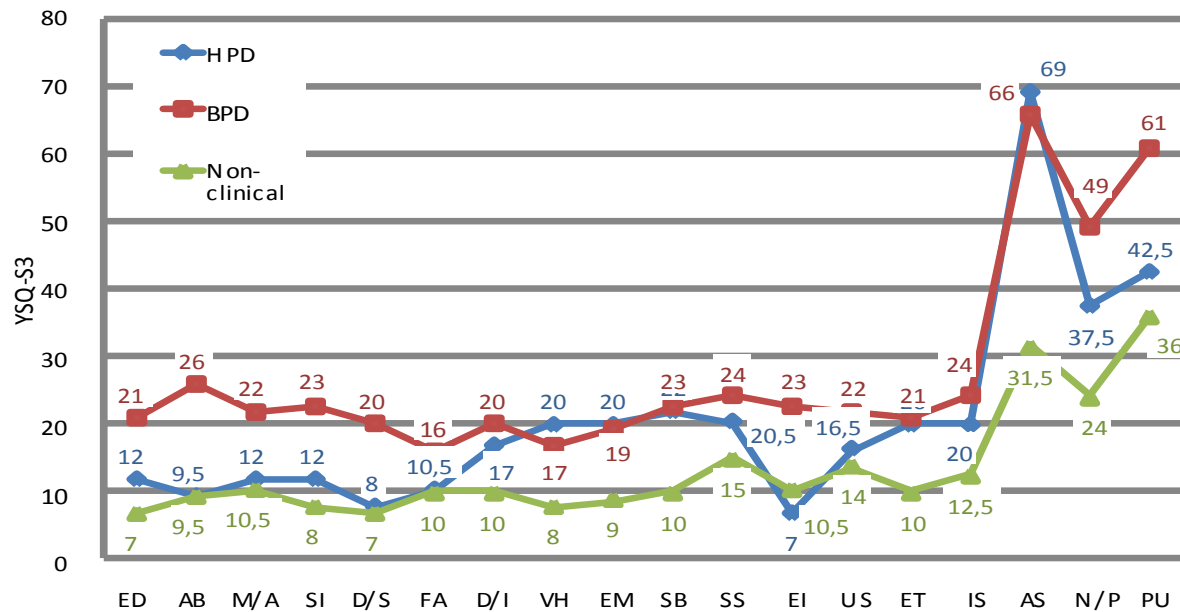
## Participants and procedure:

- **The study sample** consisted of 75 adult subjects diagnosed with BPD between 2009 and 2014 in Tg. Mures psychiatric services.

## Measures:

- *Clinical Interview for DSM Axis II (SCID-II)* was used for diagnosis of BPD and HPD.
- *Young Schema Questionnaire S3 - YSQ-S3* consists of 114 questions and measures 18 EMS.
- An EMS is considered enabled over 17 of the maximum score of 30.

# Results – first study



Comparative representation of EMS in BPD, HPD and non-clinical sample

## Agenda for YSQ-S3 test:

- ED - Emotional Deprivation
- AB – Abandonment
- M/A - Mistrust/Abuse
- SI - Social Isolation
- D/S- Defectiveness/Shame
- FA – Failure
- D/I - Dependence/Incompetence
- VH - Vulnerability to Harm and Illness
- EM - Enmeshment/Undeveloped self
- SB - Subjugation
- SS - Self-Sacrifice
- EI - Emotional Inhibition
- US - Unrelenting Standards/Hyper criticalness
- ET - Entitlement/Grandiosity
- IS - Insufficient Self-control/Self-discipline
- AS - Approval/Recognition Seeking
- N/P - Negativity/Pessimism
- PU - Punitiveness.

# Results – first study

- We found a highly statistically significant difference ( $P = 0.0001$ ) between representation of **all 18 EMS** in BPD sample and non-clinical trial.
- Comparing the **18 EMS** in BPD and HPD samples, we found a highly statistically significant difference ( $P=0.0001$ ) for **6 EMS**: Emotional Deprivation, Abandonment, Mistrust/Abuse, Social Isolation, Defectiveness/ Shame, Failure.
- We found a statistically significant difference ( $0.001 < p < 0.05$ ) between BPD and HPD for **8 EMS**: Dependence/Incompetence, Insufficient Self-control/Self-discipline, Self-Sacrifice, Approval/Recognition Seeking, Negativity/Pessimism, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Punitiveness.
- We found no statistically significant difference ( $p > 0.05$ ) between the BPD and HPD for **4 EMS** taking of deficiency limits and interpersonal dependency: Vulnerability to Harm and Illness, Enmeshment/Undeveloped self, Entitlement/Grandiosity, Subjugation.

# Results – second study

Table 1. *Correlations indexes matrix*

| Variables | DE           | AB           | NA           | IS...        | DR           | ES           | DI           | VR           | PE           | SB           | AS           | IS..         | SH          | RG           | AI           | CA           | NP           | PE           |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| DE...     | 1.0          | <b>0.7**</b> | <b>0.4**</b> | <b>0.4**</b> | 0.1          | 0.2          | 0.1          | 0.1          | -0.1         | 0.1          | 0.1          | 0.2          | 0.0         | 0.1          | <u>0.3*</u>  | 0.2          | <u>0.3*</u>  | 0.1          |
| AB...     | <b>0.7**</b> | 1.0          | <b>0.5**</b> | 0.2          | 0.1          | 0.0          | 0.1          | 0.0          | 0.0          | 0.1          | 0.2          | 0.1          | 0.0         | 0.0          | <u>0.3*</u>  | <u>0.3*</u>  | 0.2          | 0.1          |
| NA...     | <b>0.4**</b> | <b>0.5**</b> | 1.0          | <b>0.4**</b> | 0.0          | 0.0          | 0.0          | 0.1          | 0.0          | 0.0          | 0.0          | 0.2          | 0.1         | <b>0.4**</b> | 0.2          | 0.2          | <u>0.3*</u>  | 0.2          |
| IS...     | <b>0.4**</b> | 0.2          | <b>0.4**</b> | 1.0          | <b>0.4**</b> | 0.1          | 0.0          | 0.0          | 0.0          | 0.1          | 0.0          | <b>0.4**</b> | 0.2         | 0.2          | <b>0.4**</b> | 0.2          | <b>0.4**</b> | <u>0.3*</u>  |
| DR...     | 0.1          | 0.1          | 0.1          | <b>0.4**</b> | 1.0          | <b>0.5**</b> | <b>0.4**</b> | 0.1          | 0.0          | 0.1          | 0.0          | 0.2          | 0.2         | 0.0          | 0.2          | <u>0.3*</u>  | 0.2          | <u>0.3*</u>  |
| ES...     | 0.2          | 0.0          | 0.0          | 0.1          | <b>0.5**</b> | 1.0          | <b>0.4**</b> | 0.2          | 0.1          | 0.2          | 0.1          | 0.0          | 0.1         | -0.1         | 0.1          | 0.2          | <u>0.3*</u>  | <u>0.3*</u>  |
| DI...     | 0.1          | 0.1          | 0.0          | 0.0          | <b>0.4**</b> | <b>0.4**</b> | 1.0          | <b>0.5**</b> | <b>0.4**</b> | <b>0.4**</b> | <u>0.3*</u>  | 0.0          | 0.0         | 0.0          | 0.0          | <u>0.3*</u>  | <b>0.4**</b> | 0.2          |
| VR...     | 0.1          | 0.0          | 0.1          | 0.0          | 0.1          | 0.2          | <b>0.5**</b> | 1.0          | <u>0.3*</u>  | <u>0.3*</u>  | <u>0.3*</u>  | 0.0          | 0.2         | -0.1         | -0.1         | 0.2          | <b>0.4**</b> | 0.2          |
| PE...     | -0.1         | 0.1          | 0.0          | 0.0          | 0.0          | 0.1          | <b>0.4**</b> | <u>0.3*</u>  | 1.0          | <b>0.5**</b> | <u>0.3*</u>  | 0.0          | 0.0         | 0.0          | 0.1          | <b>0.4**</b> | <u>0.3*</u>  | 0.2          |
| SB...     | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.2          | <b>0.4**</b> | <u>0.3*</u>  | <b>0.5**</b> | 1.0          | <b>0.6**</b> | 0.1          | 0.1         | 0.0          | 0.1          | <b>0.6**</b> | <b>0.5**</b> | <b>0.5**</b> |
| AS...     | 0.1          | 0.2          | 0.0          | 0.1          | 0.0          | 0.1          | <u>0.3*</u>  | <u>0.3*</u>  | <u>0.3*</u>  | <b>0.6**</b> | 1.0          | 0.2          | 0.0         | 0.0          | 0.0          | <b>0.4**</b> | <u>0.3*</u>  | <u>0.3*</u>  |
| IS..      | 0.2          | 0.1          | 0.2          | <b>0.4**</b> | 0.2          | 0.0          | 0.0          | 0.0          | 0.0          | 0.1          | 0.2          | 1.0          | <u>0.3*</u> | 0.0          | <u>0.3*</u>  | 0.2          | <u>0.3*</u>  | <u>0.3*</u>  |
| SH...     | 0.0          | 0.1          | 0.1          | 0.2          | 0.2          | 0.1          | 0.0          | 0.2          | 0.0          | 0.1          | 0.0          | <u>0.3*</u>  | 1.0         | 0.2          | 0.1          | 0.1          | <u>0.3*</u>  | <u>0.3*</u>  |
| RG...     | 0.1          | 0.0          | <b>0.4**</b> | 0.2          | 0.0          | -0.1         | 0.0          | -0.1         | 0.0          | 0.0          | 0.0          | 0.0          | 0.2         | 1.0          | <u>0.3*</u>  | 0.1          | 0.2          | 0.1          |
| AI...     | <u>0.3*</u>  | <u>0.3*</u>  | 0.2          | <b>0.4**</b> | 0.2          | 0.1          | 0.0          | -0.1         | 0.1          | 0.1          | 0.0          | <u>0.3*</u>  | 0.1         | <u>0.3*</u>  | 1.0          | <u>0.3*</u>  | <u>0.3*</u>  | 0.2          |
| CA...     | 0.2          | <u>0.3*</u>  | 0.2          | 0.2          | <u>0.3*</u>  | 0.2          | <u>0.3*</u>  | 0.2          | <b>0.4**</b> | <b>0.6**</b> | <b>0.4**</b> | 0.2          | 0.1         | 0.1          | <u>0.3*</u>  | 1.0          | <b>0.5**</b> | <b>0.5**</b> |
| NP...     | <u>0.3*</u>  | 0.2          | <u>0.3*</u>  | <b>0.4**</b> | 0.2          | <u>0.3*</u>  | <b>0.4**</b> | <b>0.4**</b> | <u>0.3*</u>  | <b>0.5**</b> | <u>0.3*</u>  | <u>0.3*</u>  | <u>0.3*</u> | 0.2          | <u>0.3*</u>  | <b>0.5**</b> | 1.0          | <b>0.6**</b> |
| PE...     | 0.1          | 0.1          | 0.2          | <u>0.3*</u>  | <u>0.3*</u>  | <u>0.3*</u>  | 0.2          | 0.2          | 0.2          | <b>0.5**</b> | <u>0.3*</u>  | <u>0.3*</u>  | <u>0.3*</u> | 0.1          | 0.2          | <b>0.5**</b> | <b>0.6**</b> | 1.0          |

Correlation index of *Spearman* ranks,  $p < 0.05^*$ ,  $p < 0.01^{**}$

# Results – second study

- The highest correlation,  $r = 0.7$  was found between Emotional Deprivation and Abandonment, EMS belonging to the same field - separation and rejection.
- We found  $r = 0.6$  correlation between the following EMS:
  - Subjugation and Self-Sacrifice, Subjugation and Approval/Recognition Seeking (interpersonal dependency field)
  - Negativity/Pessimism (hyper vigilance and inhibition field).
- We found  $r = 0.5$  correlation between the following EMS:
  - Abandonment and Mistrust /Abuse (the separation and rejection field),
  - Defectiveness/Shame (separation and rejection area) and Failure (autonomy and performance field),
  - Dependence/Incompetence and Vulnerability to Harm and Illness (the autonomy and performance area),
  - Enmeshment/Undeveloped self (autonomy and performance area) and Subjugation (interpersonal dependency field),
  - Subjugation and Negativity/Pessimism (hyper vigilance and inhibition field),
  - Subjugation and Punitiveness (hyper vigilance and inhibition area),
  - Approval/Recognition Seeking and Negativity/Pessimism and Approval/Recognition Seeking and Punitiveness.

# Conclusion

- We found a highly statistically significant difference between representation of **all 18 EMS** in BPD sample and non-clinical trial.
- Comparing the 18 EMS in BPD and HPD samples, we found a highly statistically significant difference for **6 EMS**: Emotional Deprivation, Abandonment, Mistrust/Abuse, Social Isolation, Defectiveness/ Shame, Failure.
- We found a statistically significant difference between BPD and HPD for **8 EMS**: Dependence/ Incompetence, Insufficient Self-control/Self-discipline, Self-Sacrifice, Approval/Recognition Seeking, Negativity/Pessimism, Emotional Inhibition, Unrelenting Standards/ Hypercriticalness, Punitiveness. Taking the field of deficiency limits, dependence on others, hyper vigilance and inhibition, these EMS are significantly higher represented in the BPD sample compared to the HPD one.
- We found no statistically significant difference between the BPD and HPD for **4 EMS** taking of deficiency limits and interpersonal dependency: Vulnerability to Harm and Illness, Enmeshment/Undeveloped self, Entitlement/Grandiosity, Subjugation. We consider these EMS more characteristic for HPD than BPD.

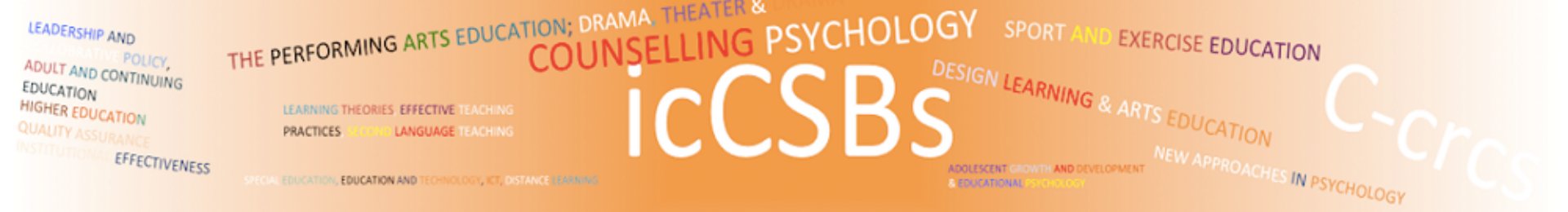


# Conclusion

- Evaluating the correlations existing among EMS in BPD group, we found that the highest correlation was between Emotional Deprivation and Abandonment, EMS belonging to the same field - separation and rejection. More emotionally deprived the subject feels, more intense the feeling of abandonment is and vice versa.
- We found positive correlations between Subjugation, as factor of interpersonal dependency field and several EMS of the same domain as Self-Sacrifice, Approval/Recognition Seeking and Enmeshment/Undeveloped self. Also, Subjugation was positive correlated with Negativity/Pessimism and Punitiveness, taking the hyper vigilance and inhibition field.
- We consider that seeking for approval and recognition maintains Negativity/Pessimism and Punitiveness. Defectiveness/Shame and Failure, Negativity/Pessimism and Punitiveness and Vulnerability to Harm and Illness and Dependence/ Incompetence were found interdependent.

# Implications for policy/Practice

- All 18 EMS were enabled in BPD patients, which suggests the extensive emotional, cognitive and behavioral impairment of these subjects comparing to mentally healthy persons.
- **6 EMS** were found very characteristic for BPD compared to HPD: Emotional Deprivation, Abandonment, Mistrust/Abuse, Social Isolation, Defectiveness/Shame and Failure. We identified these EMS as important elements of differential diagnosis between BPD and HPD. This is especially useful because they are similar in many aspects and, sometimes can be hard to differentiate.
- Some correlations between EMS, such as Emotional Deprivation and Abandonment, Self-sacrifice and Subjugation, Enmeshment/Undeveloped Self and Approval/Recognition Seeking, Negativity/Pessimism, and Punitiveness suggest the same etiopathogenetic source for these features.
- We consider these findings valuable because they can be recovered in psychotherapy.
- Schema Therapy, considered very efficient in BPD treatment, is based on evaluating and discussing these Early Maladaptive Schemas.



# Impact of Early Maladaptive Schemas in the Development of Borderline Personality Disorder

Dana Cimpan,  
Aurel Nirestean, Lukacs Emese, Alina Radu

University of Medicine and Pharmacy, Psychiatric Clinic 2, Tg. Mures,  
Romania