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Adolescence - a second chance?  
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## **Traumatic experience, alexithymia and dissociation in adolescent and adult patients with addictions**

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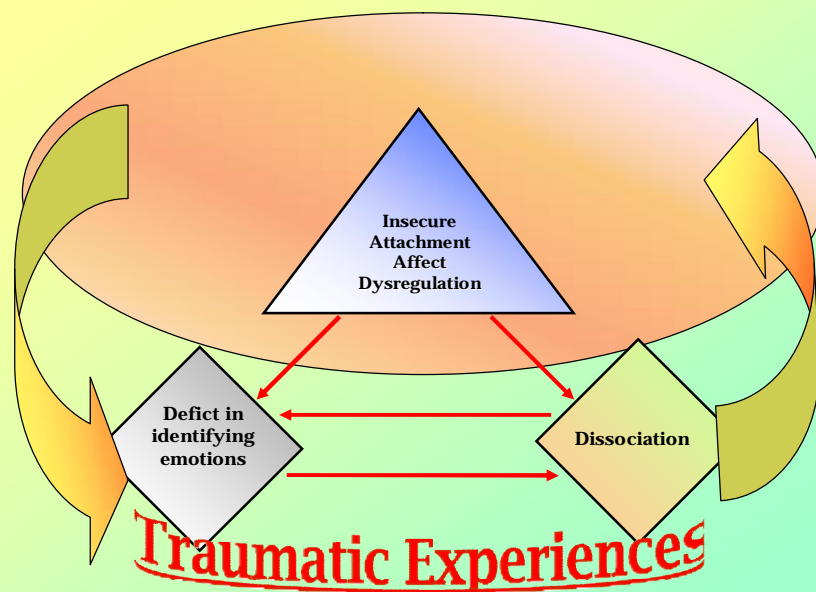
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### **Pathological addictions in adolescence**

- Addiction behaviors appear during adolescence
- These include alcoholism, tabagism, toxicomania, eating disorders, behavioral addictions, etc.
- The onset of addiction is related to the vulnerability of the adolescent and this life phase.
- Addiction behavior can be seen as defensive response to stress and trauma, to failures of mentalization and deficits in affect-regulation linked to early trauma.
- These also relate to insecure attachment.
- This can lead to negative and overwhelming emotions.
- The adolescent responds with addiction behaviors, to produce dissociation that closes off the psychic pain.

## Psychopathological factors in dependent behavior in adolescence



*Every single psychopathological factor further increase all the others to which it is correlated and is, at the same time, increased by these.*

## Pathological Addiction Definition

A morbid behaviour characterized by the distorted use of **a substance, an object** or **a behavior**, linked to a dysfunctional mental state characterized by a feeling of irrepressibility, and by the compulsory need to be repeated in compulsive ways.

An intrusive condition in which the phenomenon of the **craving** (the hunger, or the irresistible desire), of the addiction or its abstinence are present, in a cycle of an uncontrollable and unstoppable habit, that causes a clinically meaningful uneasiness/distress.

# CRAVING

The craving is the syndromic base condition of the addiction, characterized by an **appetitive urgency of pleasure seeking** and an irreducible acting out, even if detrimental to the subject him/herself; or a visceral and overwhelming “hunger” that underestimates the risks and disowns the possible negative consequences.

The Craving includes:

- 1) the irresistible desire;**
- 2) the failure of the will to withstand the impulse to act;**
- 3) the impulsive acting out;**
- 4) the compulsive reiteration of the addiction behavior.**

The Craving is a dysfunctional mental state that is strengthened:

- by the positive representations linked to the pleasure of the dependence;
- by the negative and painful representations of the abstinence;
- by the positive representations of the reduction of the anxiety and the dysphoric mood with the acting out of the addiction behavior.

## The obsessive-impulsive-compulsive continuum in craving

- Substance abuse has a compulsive aspect linked to its inadequate control (Skodol (1994), Hollander and coll. (1996), Janiri (2006)).
- Obsessiveness, impulsiveness and compulsiveness represent a continuum from the tendency to overestimate the danger and to avoid risk, to a reduced perception of the danger and high risk-seeking behavior.
- The compulsive disorders are characterized by marked avoidance of danger, a strong aversion to risk and by high-levels of precursory anxiety.
- Impulsive disorders are characterized by the presence of risk-seeking behaviors, by a reduced ability to avoid danger and low levels of precursory anxiety (cluster B disorders, impulse control disorders, paraphilias). They are characterized by pleasure seeking, irrespective of negative consequences.
- **Both classes of disorders concern an inability to delay or inhibit acting out of behaviors that tend to be repetitive, and whose principal function is to reduce anxiety and dysphoria.**

## Obsessive-impulsive-compulsive spectrum of craving in the addiction

### 1) **OBSESSIVENESS**

- a) recursive thoughts and images concerning the experiences of dependence or the ideations related to the dependence (e.g. excessive absorption in reliving past dependence experiences or in day-dreaming or in programming future experiences of dependence);
- b) the thoughts and the images related to the behavior of dependence are egosyntonic and cause, at the same time, a generalized tension;

### 2) **IMPULSIVENESS**

- a) restlessness, anxiety, irritability or nervousness when it isn't possible to put the dependence behavior into effect;
- b) recurrent failure to withstand and to regulate the desires of dependence and the impulses to put the behavior of dependence into effect.

### 3) **COMPULSIVENESS**

- a) repetitive behaviors of dependence that the person feels forced to put into effect, also against his own will, despite of the possible negative consequences, as a result of the recurrent fantasies of dependence and of the deficit of impulse control;
- b) the compulsory behaviors or actions of dependence are directed to avoid or to prevent states of uneasiness or to relieve a dysphoric mood (e.g. feelings of impotence, irritability, inadequacy).

## Behavioral addictions

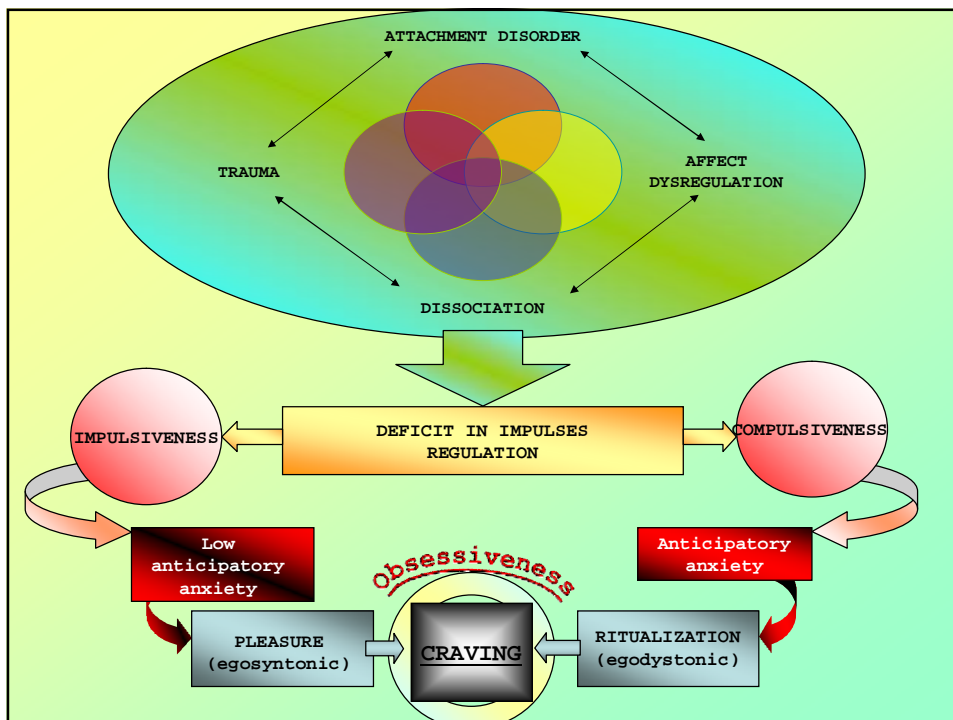
In addition to drugs and alcohol are:

- the technological addictions (e.g. Internet, video games, etc.);
- gambling addiction;
- compulsive shopping;
- sexual addiction;
- eating related addictions (e.g. uncontrolled feeding disorder, orthorexia nervosa; controlled fasting);
- job addiction;
- physical exercise addiction;
- affective addiction (the continuous and incessant search for sentimental experiences and states of falling in love).

## Psychodynamic aspects of addictions

Other factors associated with the different forms of addiction are:

- **Insecure or disoriented/disorganized attachment**
- **Trauma**
- **Affective Dysregulation/ deficit of mentalizing emotions.**
- **Dissociation/ states of altered conscience**
- **Craving**



## Research data

(Caretti, Craparo & Schimmenti, 2006)

- We examined the impact of dissociation, of alexithymia/affective dysregulation and of PTSD symptoms on the consumption of drugs in 412 young people in late adolescence at school/university.
- Results showed that those consuming psychotropic substances showed higher scores in dissociation, intrusive experiences and behaviors around tension reduction.
- There was a strong correlation between trauma, affect-dysregulation and dissociation.

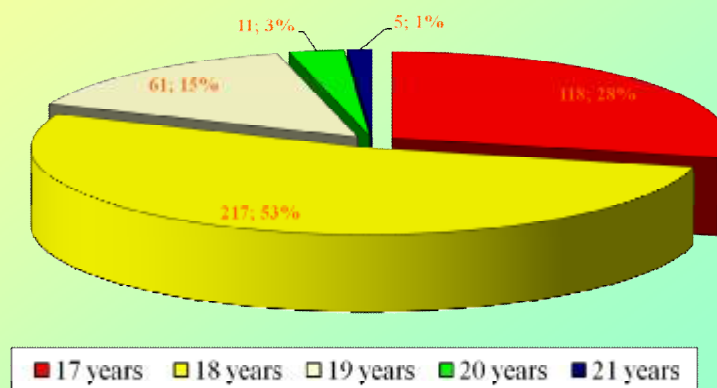
## RESEARCH - I – The sample

N = 412 adolescents belonging to school population

Males = 194 (47.1%); Females = 218 (52.9%)

Age: M=17.5; sd = 0.81; range 17-21

Age Variable Distribution



## RESEARCH - I – Instruments

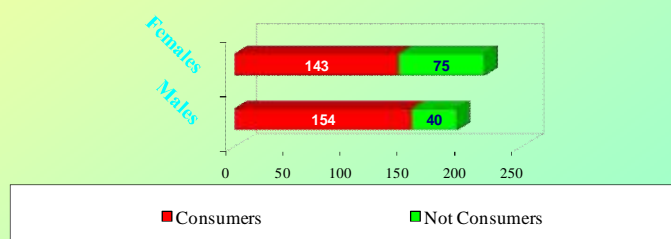
- The Adolescent Dissociative Experiences Scale (A-DES; Armstrong, Putnam, Carlson, Libero & Smith, 1997) is a screening device for psychological dissociation.
- The Toronto Alexithymia Scale (TAS-20: Bagby, Parker & Taylor 1994; Bagby, Taylor & Parker, 1994) for affective dysregulation.
- The Trauma Symptom Inventory-Alternate Version (TSI-A: Briere, 1995) for post-traumatic stress
- The Questionario sulle Abitudini Giovanili (QAG: Craparo, Epifanio, De Grazia, Torrasi, Schimmenti & Caretti, data not published) is a self-report test for the screening of substance dependence.

## RESEARCH - I – Outcomes

72.1% (297) of the sample reported using psychotropic substances, including alcohol.

Male rates 79.4% (154/194) were significantly higher than female subjects 65.6% (143/218) ( $p < .01$ )

Use of drugs related to the sex variable



# RESEARCH - I – Outcomes

Dissociation, alexithymia/ affective-dysregulation and traumatic experiences were correlated.

QAG scores (substance abuse) correlated with A-DES (dissociation) scores ( $\rho = .275, p < .01$ ) and the weighted scores relate to the perceived traumatic conditions (PTC),.

<u>Table 1. Correlations between dissociative experiences, alexithymia and traumatic experiences in a late adolescent student sample (n=412).</u>			A-DES	TAS-20	Perceived Traumatic Conditions*
Spearman Rho	A-DES	Correlation Coefficient	-	,433(**)	,649(**)
	TAS20	Correlation Coefficient	,433(**)	-	,431(**)
	Perceived Traumatic Conditions*	Correlation Coefficient	,649(**)	,431(**)	-

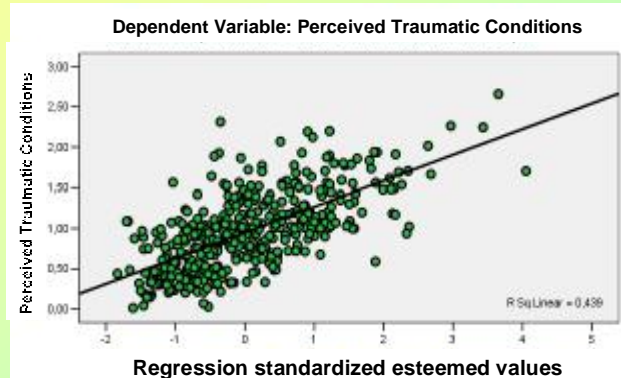
\* Weighted mean (scale score/number of scales) of TSI-A clinical scales.

\*\* Correlation is significant at 0.01 level (2-tails).

# RESEARCH - I – Outcomes

Multiple linear regression confirmed that A-DES (dissociation) items explain the PTC (perceived trauma) scores: [correct ( $F=12.879, df1 =30, df2=376, p < .01$ ; adjusted Rsq = .467,  $p < .01$ ) and not correct ( $F=14.100, df1=30, df2=376, p < .01$ ; adjusted Rsq = .492,  $p < .01$ )]

The "Dissociation" scale of the TSI-A; and the TAS-20 (alexithymia) are effective predictors of the PTC (perceived trauma) scores: ( $F=17.173, df1=20, df2=417, p < .01$ ; adjusted Rsq = .425,  $p < .01$ ).



**Final Model**

\* Predictors:

A-DES; TAS-20

Dissociation and affect-dysregulation explain the presence of traumatic symptomatology.

## RESEARCH - I – Outcomes

1. Logistic regression showed only dissociation (A-DES) and not the other factors, predicted substance use (Beta = .234; Wald=6.757,  $p < .01$ ; chi-square=7.282,  $df=1$ ,  $p < .01$ ).
2. Multiple linear regression, showed the items of the A-DES (dissociation) are moderate predictors of the QAG (substance abuse) scores ( $F=2.865$ ,  $df1=30$ ,  $df2=263$ ,  $p < .01$ ; adjusted  $Rsq = .160$ ,  $p < .01$ );
3. TSI-A scores (trauma symptoms) however, were better predictors. ( $F=3.089$ ,  $df1=86$ ,  $df2=194$ ,  $p < .01$ ; adjusted  $Rsq = .391$ ,  $p < .01$ ).
4. Neither TAS-20 (alexithymia), or the other three factors, singly analyzed, are valid predictors of the QAG scores.

## RESEARCH - I – Summary

- Adolescents reporting use of psychotropic substances report greater intrusive experiences, tension-reduction behaviors and dissociative phenomena.
- Alexithymia and dissociation result from traumatic conditions.
- Dissociative mechanisms, are an extremely important variable for the understanding the development of pathological addiction, and explain both being substance consumers and, together with the perceived traumatic states, the degree of addiction of the subjects.

## RESEARCH - II – Hypothesis

To further test the model, we researched 50 heroin dependent subjects.

1. Strong correlations expected between traumatic experience, alexithymia/ affective-dysregulation and psychological dissociation (Caretta & Craparo, 2005; Caretta, Craparo, Ragonese & Schimmenti, 2005);
2. Dissociation and the affect-dysregulation would have significantly enhance the impact of traumatic experiences (Caretta, Franzoni, Craparo, Pellegrini & Schimmenti, 2006);
3. Inability to identify emotions (alexithymia/affective dysregulation), and distinguish them from somatic feelings hypothesised as the best predictor of traumatic experience

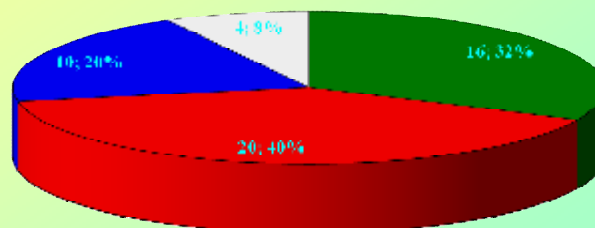
## RESEARCH - II – The sample

**N = 50 subjects with a diagnosis of drug dependence (heroin)**

Males = 38 (76%); Females = 12 (24%)

Age: M=27.76; sd=6.57; range: 18-46 years

Age Variable Distribution



■ 18-24 years ■ 25-30 years ■ 31-36 years □ Over 36 years

## RESEARCH - II – Instruments

- The Dissociative Experiences Scale-II (DES - II; Carlson & Putnam, 1993)
- The 20 Item Toronto Alexithymia Scale (TAS-20: Bagby, Parker & Taylor 1994; Bagby, Taylor & Parker, 1994)
- The *Trauma Symptom Inventory-Alternate Version* (TSI-A: Briere, 1995) for post-traumatic stress

*The order of the test completion balanced to avoid possible sequence effects. After giving informed consent, the subjects consecutively completed the three tests.*

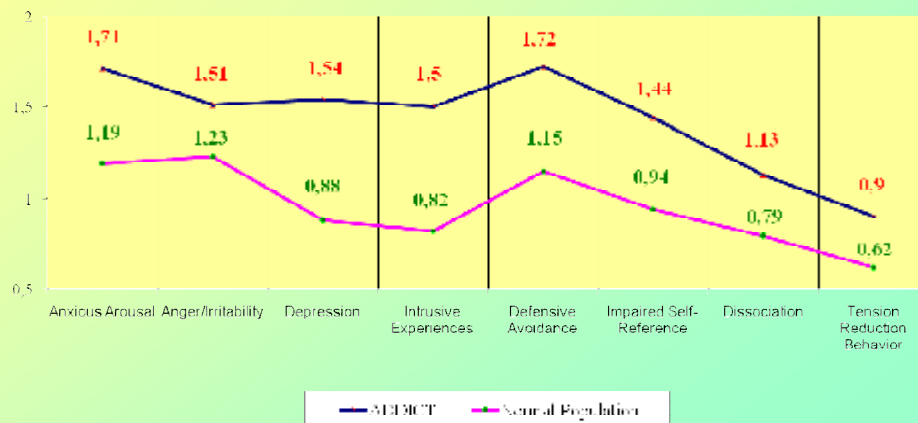
## RESEARCH – II – Outcomes

- 58% of the sample (29 subjects) showed significant dissociative symptomatology (DES-II scores  $\geq 30$ ) significantly higher than Italian representative scores.
- TAS-20 score mean (M=56.90; sd=14.12; range from 32 to 89), was high and in the “borderline” area for the alexithymic conditions.
- Regarding the TSI-A (alexithymia) mean scores related to the perceived traumatic condition (PTC), through weighted mean.
- The weighted PTC scores (M = 1.43; sd=0.54; range from 0.53 to 2.45) of the addicted subjects was substantially higher than those of the previous adolescents studied (M=0.95; sd=0.48;  $p < .0001$ ).

## RESEARCH – II – Outcomes

Drug Dependent subjects had very severe traumatic symptoms. The mean scores (TSI-A) are significantly higher than previous adolescents studied.

Comparison between TSI-A Scales Scores



## RESEARCH – II – Outcomes- higher in females

- Females, and those younger ( $F=1.668$ ,  $t=2.035$ ,  $p < .05$ ), showed higher (DES-II) dissociation scores ( $p < .05$ ), higher rates of first factor of the TAS-20 ( $p < .05$ ), more severe PTC (trauma) scores ( $p < .05$ ) and Dissociation (TAS-20) ( $p < .01$ ), Anger/Irritability ( $p < .01$ ), Behaviors of Tension Reduction ( $p < .05$ ), Depression ( $p < .05$ ) and Inadequate Sense of the Self ( $p < .05$ ) scales of the TSI-A.

- This is consistent with research literature where the presence of externalizing type disorders in females is correlated with a more problematic personal history, traumatic events during development, maltreatment and/or abuses, and the presence of more severe psychopathological symptomatology and with a less favorable prognosis.

## RESEARCH – II – Outcomes

			DES-II	TAS-20	Perceived Traumatic Conditions
Spearman's Rho	DES-II	Correlation Coefficient	-	,576	,752
	TAS-20	Correlation Coefficient	,576	-	,586
	Perceived Traumatic Conditions	Correlation Coefficient	,752	,586	-

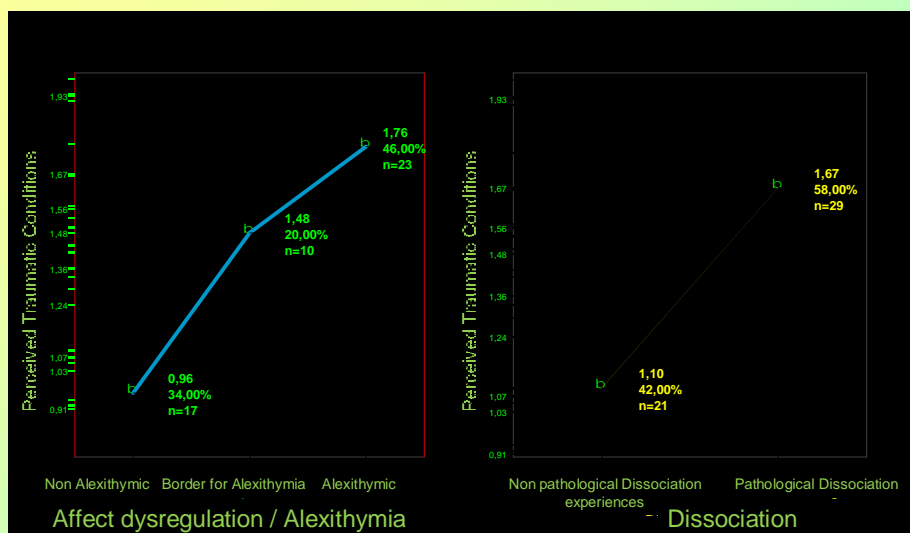
**Dissociative experiences (DES-II) are associated with symptomatic trauma clusters** (single scale of the TSI-A (.369 <rho <.743; all the p <.01).

**Also associated with affect-dysregulation**, measured through the TAS-20 (.318 <rho <.600, all the p <.01, except the cluster "Defensive Avoidance", p <.05);

**The first factor of the TAS-20 (alexithymia) shows strong correlations with TSI-A trauma symptoms** (.435 <rho <.674, all the p <.01), **the second factor only moderate correlations** (.282 <rho <.494, all the p <.05, the scale "Anxious Activation", "Depression", "Anger/Irritability", "Dissociation", "Inadequate Sense of the Self" also p <.01), while the **third factor exclusively correlates with the scale "Anger/Irritability"** (rho = .310, p <.05).

## RESEARCH – II – Outcomes

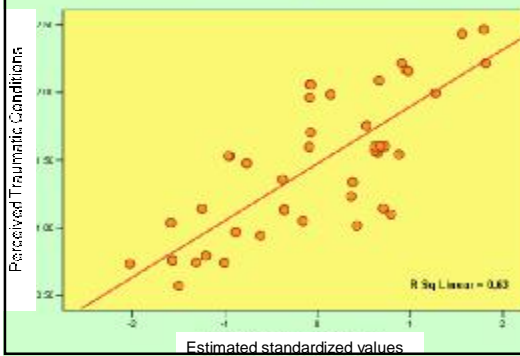
In Drug Dependence the alexithymic areas are more extended and the dissociation more pervasive, with an increases in traumatic symptomatology.



# RESEARCH – II – Outcomes

Logistic multiple regression stepwise analysis undertaken, with PTC scores as dependent variable and, DES-II, TAS-20, and to the three factors F1, F2 and F3 of the TAS-20 as independent variables. **The regression equation produced included only the DES-II/dissociation scores and those of the first factor of the TAS-20/alexithymia** (final model:  $F=40.009$ ,  $df1=2$ ,  $df2=47$ ,  $p < .01$ ; adjusted  $Rsq = .614$ ,  $p < .01$ ).

Scatterplot of PTC values\* by a regression model that includes dissociative experiences (DES-II) and deficit to identify emotions (Factor 1 of the TAS-20) in a sample of subjects with Drugs Dependence (n=50).



Dissociation and affective dysregulation are effective predictors of traumatic symptomatology in addiction.

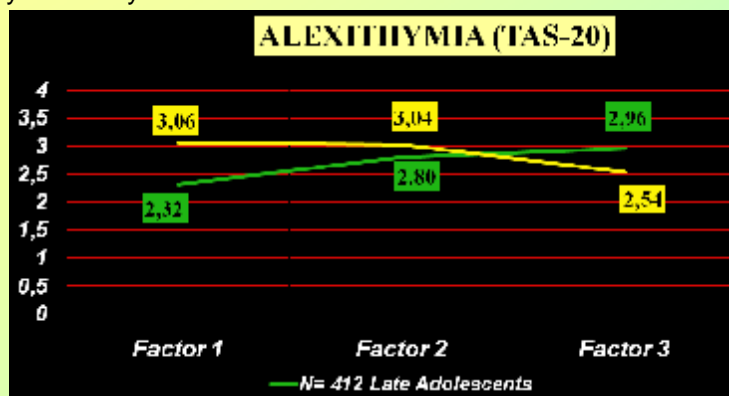
\* Scores of TSI-A Dissociation scale excluded

\*\* Regression model predictors: DES-II, Alexithymia Factor 1

## WORDS WITHOUT EMOTIONS

(see Caretti et al., 2007),

In those addicted, the affective-dysregulation arises from a deficit in the ability to identify the affective states.



**TAS-20 Factor 1 (DIF):** difficulty in identifying the emotions and to distinguish them from the somatic feelings;

**TAS-20 Factor 2 (DDF):** difficulty in describing emotions and feelings;

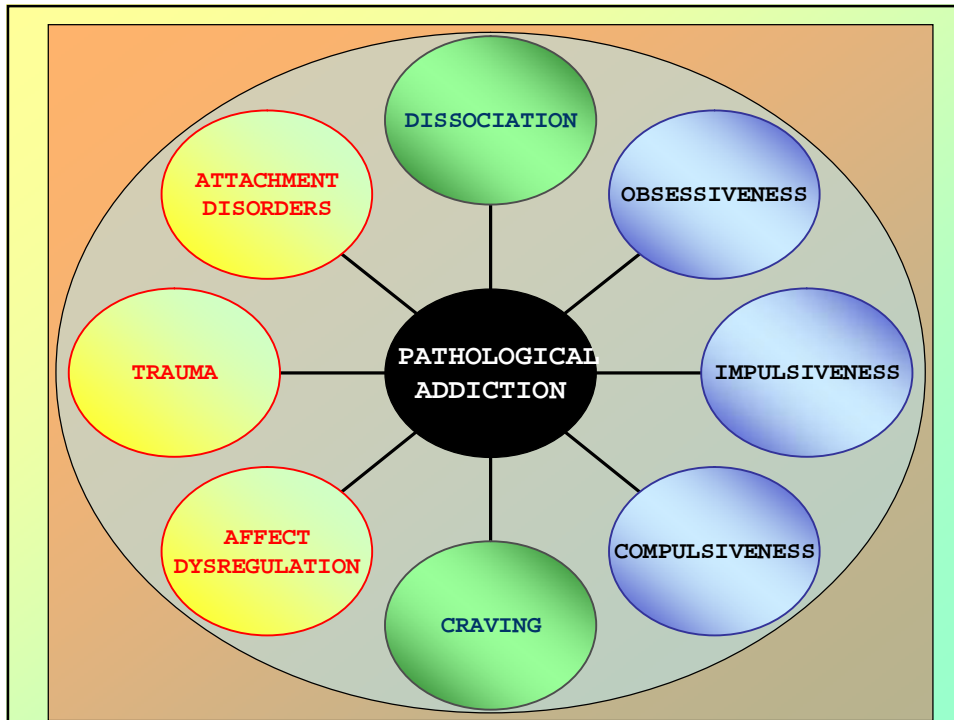
**TAS-20 Factor 3 (EOT):** externally oriented thought.

## RESEARCH - II – Discussion

- The subjects with Drug Dependence reported severe alexithymic conditions, dissociative states and traumatic experiences. This supports the hypothesis that such factors have a decisive role in the development of forms of pathological dependence.
- The correlation between alexithymia, psychological dissociation and perceived traumatic conditions is very strong.
- Dissociative experience predicts the level of traumatic experiences in those with Drug Dependence.
- Alexithymia is not a generally valid predictor of the perceived traumatic conditions. Only the first factor (unable to identify emotions and to distinguish them from somatic feelings), is a significant predictor of these conditions.
- This is the element which is the most direct indicator inside the TAS-20 of a deficit in the regulation of affective states and behaviors.

### The impulsive-compulsive behavior in the addiction as a dissociative condition

- Dissociation is a normal function of the mind that excludes from consciousness emotions and feelings characterized by inner and external suffering, creating a shelter from the flood of an excess of painful stimuli. It has the function of protecting the self, through an active inhibitory process to construct a more favorable parallel reality.
- The temporary relief from such retirement is not necessarily pathological. But **when the withdrawal results in loss of impulse control and morbid reiteration, it can involve the vital loss of contact with reality, compulsive autoerotic activities and various forms of pathological dependence.**
- Impulsive-compulsive behaviors are **the pathological expression of forced acting on the basis of an anxious-dysphoric condition of traumatic origin**, to produce a protective and self-comforting “mental shelter” (Steiner, 1993) through the creation of sensory experiences and non ordinary states of conscience within which to be absorbed and dissociated.



### Guidelines for the Psychodynamic Psychotherapy of the Addiction

To develop and to stimulate emotional intelligence, i.e. the ability to mentalize and to regulate the affects: to identify/express the emotions and to correlate them to the bodily experience;

To make conscious the cognitive-affective process at the base of the dissociative mechanisms, i.e. the escape from the ordinary state of conscience as a defense from overwhelming emotions;

To favor the elaboration and the integration of the traumatic memories, particularly those experiences of psychological carelessness happened in the primary relationship, during the infancy and the adolescence, and that hesitate, at the implicit level, in the dysfunctional dependent behavior.

Thanks for  
your attention!