Influence of high level of psychological vulnerability factors to bipolar disorders on a semantic mediated priming task

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1. Hypomanic personality
2. Hypothymic temperament
3. Irritable temperament

Psychological vulnerability factors to bipolar disorders

AIM

Assess ASA according to vulnerability factors continuum to determine whether it could be one of the causes of semantic anomalies associated with psychological vulnerabilities to bipolar disorders.

METHODS

Population: 61 healthy adults (mean age: 30 years, mean educational level:14 years).
Inclusion criteria: aged 18 to 60 years; French native speaker; no past or current psychiatric / neurologic injury (M.I.N.I interview).

Questionnaires for the assessment of psychological vulnerability factors to bipolar disorders:
- Hypomanic Personality Scale (HPS)1
- Temperaments Evaluation of the Pisa, Paris and San Diego (TEMPS-A)2
- Beck Depression Inventory – II (BDI-II)3

Assessment of spreading activation: Semantic mediated priming task implemented in a double lexical decision task:

The prime “cloud” and the target “umbrella” are related in the semantic network by the mediator word “rain”.

Semaphore mediated priming effect: the response time for the double lexical decision task is faster for the related pair of words “cloud” and “umbrella” than for prime-target non related pairs (e.g., « holidays » and « neck »).

REFERENCES


RESULTS

Mediated priming effect:

ANOVA main effect (N=61): F(2;125) = 134.15, p < .001, η²=.69

Affective temperaments (TEMS-A):

Hypomanic Personality (HPS) ➔ 3 factors:

Depressive symptomatology (BDI-II):

No significant result was found for impact of depressive symptomatology on semantic mediated priming

CONCLUSIONS

➢ Semantic mediated priming is negatively associated with hyperthymic and irritable temperaments and is reduced in individuals with high score of social vitality.

Impairments in spreading activation, appear to be related to psychological factors (hypomanic personality and affective temperaments) considered as factors of vulnerability to bipolar disorders.

➢ Depressive symptomatology is positively associated to social vitality, hypomania and irritability. There is not impact of this symptomatology on semantic mediated priming.

Impairments in spreading activation could be related with manic symptomatology only.

➢ Exploration of spreading activation in bipolar patients will allow us to determine if impairments of this process can be considered as a vulnerability factor.