Stimulus Preceding Negativity in Anticipation of Social Evaluative Feedback in Adolescents

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Background

- Social information and peer relationships become important.
- Common onset of social anxiety (SA) problems.
- Maladaptive anticipation of social threat in SA.

H1: Less positive expectancy as SA increased

H2: More negative memory bias as SA increased

H3: More negative SPN in more SA adolescents, especially during anticipation of acceptance

H4: More negative SPN with age and puberty

Method

- 106 adolescents between 12 – 17 years old
- Social Judgment Paradigm
- Social anxiety (Composite: MASC, SPAIC, bFNE)
- Pubertal Development (PDS)

Results

- H1 & H2: No correlation: positive expectancy, negative memory and SA
- H2: Negative recall bias for high SA group (median split), t(52) = -3.57, p = .001.
- H4: No age differences in SPN amplitudes

- NetStation 4.4, Hydrocel-128 channel
- Baseline -2400 – - 2000ms before FB
- SPN: mean amplitude 200 ms before acceptance and rejection FB
- Four channel clusters: left frontal, right frontal, left posterior, right posterior

- H3: Covariates: More negative SPN in higher SA at the right frontal site, F(1, 104) = 10.17, p = .002, ηp² = .09. No difference between acceptance and rejection FB.
- H4: More negative SPN in more advanced puberty at the right frontal site, F(1, 104) = 8.80, p = .004, ηp² = .08.
- Opposite patterns at left posterior site (dipole).

Conclusions

- Anticipatory processes in normative social and emotional development related to puberty.
- Differences in anticipatory responses to social evaluative feedback associated with SA.

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References