

## Abstract

Past research suggests association between basal steroid hormone testosterone level and its changes with some individual characteristics (especially some behavioral manifestations of dominance and aggression) or different outcomes of male-male competition. This relationship is usually (in accordance with evolutionary theory) interpreted as the consequence of different individual prerequisites (or the degree of individual motivation) for high status position including winning a male-male competition.

The aim of this study was to test the adequacy of measuring jealousy reaction in adolescent boys by way of changes in salivary testosterone level and finding their associations with some individual characteristics mentioned by researchers.

For the purpose of measuring basal testosterone level and changes in this hormone level during the competition for a mate which simulated the internet mating and changes in this hormone after being informed of their failure in this competition, the boys who participated in our study provided three salivary samples.

For finding associations of basal testosterone level and these hormonal changes with some individual characteristics, the boys filled in a set of questionnaires (EATQ-R, the short version of IPIP, EBIS, ISJS, RSPQ, Rosenberg Self-esteem Scale and expanded version of SOI-R questionnaire).

By means of median split tests, pair t-tests and correlation tests (Pearson correlation) the given associations were tested.

Of the individual characteristics we looked into a tendency to significance was found only as regards the facet aggression measured by way of EATQ-R questionnaire designed for this age group. No other significant relationships of testosterone with studied aspects was found. The consequences for future research of jealousy and individual characteristics by means of testosterone levels in adolescent boys are discussed.