Stress, mental health and immunological changes in university students (pp. 57-71)

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The purpose of this research was to assess the relationship among stress, mental health and immunological changes in college students. The sample was composed by 20 first year's students from Simon Bolivar University, Venezuela, (12 males, 8 females, mean age= 17.20), who were evaluated at the beginning of the term and during the examination period (7 weeks later). Self-reporting questionnaires were used for psychosocial measures, and immunophenotyping was made to obtain their immunological parameters. Comparing the scores, it was found that stress intensity, social dysfunction, somatization and percentage of HLA-DR+ cells, increased considerably during the examination period. At the same time, a significant decrease in percentage and total number of lymphocytes, T lymphocytes, NK cells, CD8+ cells and on the number of CD4+ cells was found. Significant correlations were also found between psychosocial variables and immune parameters during the period of higher academic demand. These results suggest some immunological changes in association with higher stress and mental health impairment.