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## CHANGES OF PAIN PERCEPTION IN SUBJECTS WITH DIFFERENCES IN EMOTIONALITY

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**Introduction:** The association between pain and neuroticism varies from higher neuroticism values in patients with chronic pain compared to healthy subjects and lower neuroticism values in psychiatric patients with pain compared to psychiatric patients without pain (Bond, 1971; Merksey, 1972). Raselli & Broderick (2007) showed a possible influence of time (actual state and recall) and neuroticism on reporting pain in patients with chronic pain (Raselli & Broderick, 2007). Data from experimental studies are missing.

**Objective:** The goal was to test whether differences in neuroticism, measured with the Freiburg Personality Inventory N Scale (FPI-R N), effects the correlation between the reported subjective maximal pain threshold (SMPT) before and after an experimental pain study.

**Methods:** 20 healthy subjects divided into a non neuroticism group (NNG with FPI-R N value < 5, N =10) and a neuroticism group (NG with FPI-R N value > 5, N = 10) were exposed to aversive electric stimuli in different conditions in an experimental pain study. Before and after the experimental procedure SMPT was recorded (milliamperes/mA).

**Results:** SMPT before and after the experimental procedure correlated significantly in both groups, but with higher a correlation in the NNG ( $R^2 = 96\%$ ) in contrast to the NG ( $R^2 = 88\%$ ). The NG showed lower SMPTs (mean  $4.5 \pm 2.9\text{mA}$ ) than in the NNG (mean  $6.6 \pm 3.3\text{mA}$ ).

**Conclusion:** According to Raselli & Broderick (2007) the correlation between pre and post SMPTs in an experimental setup varies between subjects with high or low neuroticism values. Deductions and Limitations of the study are discussed.