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and NS in the EMG activity were observable. In the highest VD condition, the flexor activity showed a reversed tendency. The five subjects also showed a significant sensitization in the perceived aversiveness from the beginning to the end of the experiment. Although it's not clear if the consolidation of aversive stimulus response and the increased sensitization of aversive stimulus can be described through VAS and EMG alone, the observable effect is being mediated through increasing temporal sensory motor incongruence. Changes in the direction of the flexor muscular activity may show overcompensation due to 200 ms VD and shock. Limitations of the study (e.g. sample size) are discussed and considerations for further studies are presented.

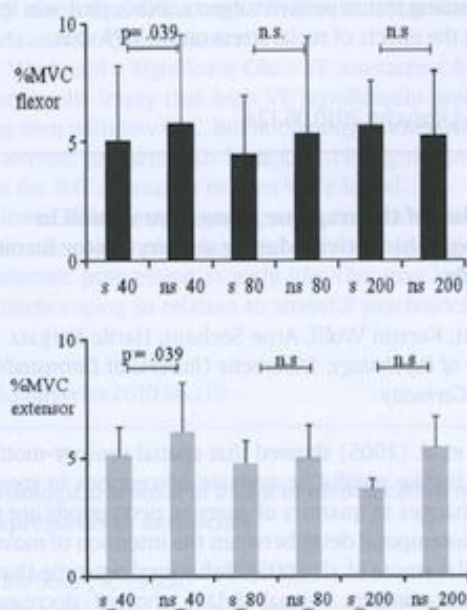


Fig. 1. Muscular activity (%MVC) of the flexor and extensor muscle of five subjects: s = shock condition; ns = no shock condition; 40, 80, and 200 = 40, 80, and 200 ms visual delay.

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Are there relations between human posture and emotions?

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Introduction: Many authors suggest that the posture of each individual is a consequence of his/her emotions and that an alteration of one factor modifies the other. Anxiety is a very clear example: it directly affects the diaphragm and its cycle. The inverse is also valid: the anxiety can be diminished by relaxing the diaphragm with deep breaths. The objective of this work was to search for relations between corporal posture and subjective emotional narrations.

Method: Twenty-eight women from 20 to 39 years, out of menstrual period, with normal corporal mass index or below weight, and without neurological, psychiatric or orthopedic problems, had their posture photographed and evaluated on Corel Draw software. Emotions had been evaluated through analogical scales for sadness, happiness, concern, anxiety. The statistical method used for analysis was linear regression.

Results: We found correlation with $p \leq 0.05$ between happiness and shoulder raise (0.04), concern and shoulder protraction (0.02), sadness and shoulder protraction (0.04), anxiety and hyperlordosis (0.04).

Discussion and conclusion: We found indications of relationships between some emotions and postures. The biggest challenge of the work was the subjectivity of the emotional narration, as the auto emotional evaluation is very complicated and may suffer great distortions. Other works and methodologies must be used to understand the extension and depth of these correlations. The importance of these findings may be of great relevance for the evaluation and treatment of diverse orthopedics and psychological pathologies.

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The quality of life enjoyment and satisfaction questionnaire (Q-LES-Q), Latvian language version: Study, validation, and quality of life measurement in posttraumatic stress disorder risk patients

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There are various reasons to study quality of life (QoL) in medical practice: for an estimation of the efficiency of methods of modern clinical medicine and various rehabilitation technologies or for an estimation of a degree of severity of a disease, efficiency of treatment. Assessment of disease-specific QoL in clinical trials appears to be a widely accepted independent outcome measurement. Considering the interest of health economics, there is a demand for valid methods for measuring health-related quality of life (HRQoL) in Posttraumatic Stress Disorder (PTSD). Among the various instruments available, a short version of the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q) by Jean Endicott has been tested extensively. This instrument was chosen since it is mental illness-related.

The purpose of the present study was to assess the evaluative and discriminative properties of the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q) by Jean Endicott when measuring disease-specific symptoms of patients with functional impairment associated with posttraumatic stress disorder (PTSD).

Methods: In total, 143 participants (males, Europeans, of average age 27.4, PTSD risk patients – Contingent of international operations) were examined. Baseline QoL was estimated by Q-LES-Q, which measures QoL in key domains. The short form includes 14 general activities of the long form, as well as 2 global items. Five-point item scores are aggregated, with higher scores indicative of greater enjoyment or satisfaction in each domain. Scores are also presented as a percentage of the maximum probable score. Q-LES-Q Latvian language version's reliability, as well as correlation between clinical symptoms and Q-LES-Q scores (construct validity), test-pretest, Cronbach alpha criterion were assessed.

Results: At baseline, QoL was significantly impaired as reflected by a mean Q-LES-Q score of 67% of the total possible score. The baseline Q-LES-Q score showed a Cronbach's α value of 0.83, indicative of reliability (the questions are of high consequence level). The reliability-consequence data is below the critical level (0.90–0.95), suggesting that Q-LES-Q items reflect and evaluate very narrow, specific manifestations of the disease. The most sensitive QoL domains are: physical health and mood, followed by: family relationships, ability to function in daily life, and psychological/spiritual (healthcare, personal faith, and life goals). Q-LES-Q has good reproducibility and also high interclass correlation coefficients for the total and domain-wise scores in PTSD-risk patients.

Conclusions: The Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q) is a self-report measure. The summary scores

were found to be reliable and valid measures in a group of PTSD-risk patients. Q-LES-Q is sensitive to important differences among the patients that are not detected by the measures usually employed. It was concluded that the Q-LES-Q has strong measurement properties for measuring stress-specific quality of life. It is a valid instrument for QoL measurements both in clinical and research studies.

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Emotion processing in words when arousal is rated: Evidence from event-related potentials

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Emotional valence and arousal are two dimensions that have been assumed to describe the emotional space in words almost completely (Russell, 1980). The dimension of arousal is often interpreted as the intensity of emotional valence (Lang et al., 1993). Two different event-related components, the early posterior negativity (EPN) and the late positive complex (LPC), are found to be related to emotional word processing. EPN effects have been suggested to reflect automatically driven attention binding by emotional stimuli which is task-unspecific (Schacht and Sommer, 2009) and related to arousal processing (Herbert et al., 2006). The consecutive LPC reflects a more elaborate processing which is task-specific and most prominent when emotional valence is task-relevant (Schacht and Sommer, 2009). In the present study, twenty-two subjects rated 180 positive, negative, and neutral words referring to their arousal level using a computerized version of the Self Assessment Manikins (SAM; Lang, 1980). Event-related potentials (ERPs) were recorded at 57 electrodes. Here, we aimed to investigate emotional effects in ERPs when emotional arousal is task relevant. No LPC effects were found indicating no elaborate processing of valence. An EPN was found only for positive words compared to neutral words. Interestingly, positive words were rated to be less arousing than negative words. Therefore, it is conceivable that EPN effects are not arousal, but valence-related.

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Negative emotion disrupts classical effects of attentional filtering in primary visual cortex: A high density ERP study

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Background. Recent electrophysiological evidence shows that the attentional filtering of irrelevant distracters can already take place

during the earliest stage of sensory processing within V1. Increasing perceptual load of a task at fixation produces a selective decrease of the neural response in V1 to an unattended peripheral distracter, consistent with the assumption of a reduction of the attentional resources available for concurrent visual processing. In line with this view, the earliest sweep of visual cortical processing in V1, as reflected by the C1 ERP component, was found to be sensitive to manipulations of perceptual load. When perceptual load of task at fixation increases, the amplitude of the C1 to an unattended peripheral distracter decreases. However, increasing perceptual load also presumably yields (uncontrolled) emotional effects, including an enhancement of affect. Because performance usually drops and difficulty augments, increasing load also triggers unwanted emotional reactions. Hence, effects of perceptual load on the primary visual cortex (as revealed by the C1 ERP component) could also partly be explained by concurrent changes in affect; the latter that are also known to reliably influence the C1. The goal of this study was to assess whether the typical effects of perceptual load in V1 could be influenced by an orthogonal manipulation of emotion.

Methods. We used a standard visual discrimination task at fixation (line orientation judgments) that was either made easy, intermediate or difficult (block design), enabling three different levels of perceptual load. Feedback on task performance was used after each block to generate either a positive or negative emotional state. In the positive emotion condition, positive feedback was given after each block, while in the negative emotion condition, negative feedback was presented. We designed the task in such a way that uncertainty about behavioral performance was high enough to render the emotional feedback informative. Importantly, in each condition (3 levels of difficulty \times 2 emotion states), non-predictive and task-irrelevant visual distracters (visual textures) were pseudo-randomly flashed in the upper peripheral visual field in such a way to generate a prominent negative C1 component. Participants performed this task, while high density (128 channels) EEG was recorded. Manipulation checks for the effective modulation of the affective state were implemented using standard anxiety and emotion questionnaires.

Results. The emotional content (either positive or negative) of the feedback had a clear effect on subjective levels of anxiety and affect, indicated by a more negative affective state after the presentation of negative, relative to positive, feedback. More importantly, we found that the C1 to the peripheral distracter was reliably influenced by the perceptual load manipulation in a predictive way: the amplitude of the C1 decreased monotonically when perceptual load at fixation increased. However, this effect was only detected when positive feedback on task performance was presented. By contrast, the presentation of negative feedback actually altered this early filtering effect in V1, as shown by a substantial reduction of the C1 during the easy-low perceptual load condition.

Conclusions. These results suggest that early gain control effects exerted by perceptual load on the primary visual cortex (C1) are flexible and depend not only on the availability of attentional/processing resources, but also on the concurrent affective state at stake.

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Effects of antisocial personality traits on event-related potentials during face processing

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Deficits of emotion processing are a common phenomenon in psychopathology, e. g. emotion recognition deficits in schizophrenia. However, the relation between emotion processing and personality traits remains a question of debate. Therefore, the present study