

## Publication

### Anxiety trait modulates psychophysiological reactions, but not habituation processes related to affective auditory stimuli

#### **JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**

**ID** 50406

**Author(s)** Martin-Soelch, Chantal; Stöcklin, Markus; Dammann, Gerhard; Opwis, Klaus; Seifritz, Erich

**Author(s) at UniBasel** [Opwis, Klaus](#) ;

**Year** 2006

**Title** Anxiety trait modulates psychophysiological reactions, but not habituation processes related to affective auditory stimuli

**Journal** International journal of psychophysiology

**Volume** 61

**Number** 2

**Pages / Article-Number** 87-97

**Keywords** emotion, sounds, psychophysiology, habituation, anxiety, orienting reaction, autonomic system

Background: It is well known that there are specific peripheral activation patterns associated with the emotional valence of sounds. However, it is unclear how these effects adapt over time. The personality traits influencing these processes are also not clear. Anxiety disorders influence the autonomic activation related to emotional processing. However, personality anxiety traits have never been studied in the context of affective auditory stimuli. Methods: Heart rate, skin Conductance, zygomatic muscle activity and subjective rating, of emotional valence and arousal were recorded in healthy subjects during the presentation of pleasant, unpleasant, and neutral sounds. Recordings were repeated 1 week later to examine possible time-dependent changes related to habituation and sensitization processes. Results and conclusion: There was not a generalized habituation or sensitization process related to the repeated presentation of affective sounds, but rather, specific adaptation processes for each physiological measure. These observations are consistent with previous studies performed with affective pictures and simple tones. Thus, the measures of skin conductance activity showed the strongest changes over time, including habituation during the first presentation session and sensitization at the end of the second presentation session, whereas the facial electromyographic activity habituated only for the neutral stimuli and the heart rate did not habituate at all. Finally, we showed that the measure of personality trait anxiety influenced the orienting reaction to affective sounds, but not the adaptation processes related to the repeated presentation of these sounds. (c) 2005 Elsevier B.V. All rights reserved.

**Publisher** Elsevier

**ISSN/ISBN** 0167-8760

**edoc-URL** <http://edoc.unibas.ch/dok/A5249019>

**Full Text on edoc** No;

**Digital Object Identifier DOI** 10.1016/j.ijpsycho.2005.07.009

**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/16135389>

**ISI-Number** WOS:000239185700001

**Document type (ISI)** Journal Article