

Konklusionen: Die Ergebnisse werden im Kontext bisheriger ätiologischer Modelle diskutiert. Der Befund einer veränderten Mind-Body Connection ergänzt weitere Studienergebnisse einer reduzierten kortikalen Repräsentation interozeptiver kardialer Signale bei Patientinnen mit einer BPS (Müller et al., 2015; Schmitz et al., 2020). Weitere Studien sind notwendig um den Zusammenhang zwischen ACEs, emotionaler Dysregulation und Veränderungen in der Mind-Body Connection experimentell zu untersuchen.

**Keywords: Affektive Wissenschaft, Subklinische Probanden**

**The real thing: visual attention to living fear-relevant animals**

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Specific fear is associated with several (attentional) biases, which are thought to be involved in the etiology and maintenance of clinically relevant fear. Visual attention biases are often studied while viewing fear-relevant pictures. It has often been found that fearful individuals initially attend to fear-relevant stimuli and subsequently avoid them. To date, it has not been investigated to what extent such biases also exist when real fear-relevant stimuli are presented. Therefore, in this eye-tracking study, eye-movement behavior was investigated while viewing two living fear-relevant animals (a tarantula and snake in separate terrariums). Participants were divided into groups with high ( $n = 23$ ) and low fear of spiders ( $n = 20$ ). We measured fear and disgust ratings, as well as the number of (initial) fixations on the two animals with portable eye-tracking glasses in two distance conditions (1 vs. 3 meters distance to the animals).

As expected, spider fearful participants rated the spider both more fear-inducing and more disgusting than the snake and this rating was unaffected by distance. Furthermore, the eye-tracking analyses revealed that all participants fixated initially (first fixation) and overall (total number of fixations) more often on the snake than the tarantula. Notably, for the total number of fixations, there was a significant interaction between the factors group, animal and distance, showing that spider fearfus tend to fixate on the spider less from a short distance in comparison to a long distance. This can be interpreted as a tendency to visually avoid the tarantula specifically when it is near. Regarding initial measures (specifically first fixations) there were no differences between the groups.

Although we did not find initial attention towards the fear-relevant stimulus, we observed a propensity to avoid the stimulus later on, as often found in prior studies. This makes further research with real animals both necessary and promising.

**Keywords: Affektive Wissenschaft, Subklinische Probanden**

**Does fear interfere? - Trait anxiety affects multimodal emotion processing of negative and positive cues**

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In everyday life, we perceive abundant emotional cues from our surroundings. Recently, research has increasingly started to look at multimodal interactions in emotion processing. Lately, this line of

## Erwachsene

research has been applied to the field of clinical psychology, with first evidence suggesting that cross-modal emotion processing is altered in mental disorders such as major depression.

In the present study, we investigated the role of anxiety in multimodal emotion processing. Based on their trait anxiety scores, healthy participants (N=33) were classified as either high or low in trait anxiety. Participants were presented with 48 emotional picture-sound combinations. The individual stimuli, taken from the IAPS and IADS, were either categorised as positive or negative and, as pairs, differed in their emotional as well as semantic congruency. Participants rated each picture-sound combination on valence and arousal.

In general, semantically congruent pairings were rated as significantly more arousing than semantically incongruent ones. This effect was most pronounced for negative picture-sound combinations. The results also show that more anxious participants rated positive stimulus combinations as less positive than participants who are less anxious. This effect was enhanced when these combinations were semantically congruent.

To conclude, the findings suggest that not just emotional congruency, but semantic congruency of multimodal cues increases feelings of arousal in individuals regardless of their anxiety levels. Furthermore, anxious people perceive positive stimuli as less positive. This is of great interest as research on anxiety has often merely focused on individuals' reactions to and ratings on negative or aversive cues. One possible explanation for these findings may be that people suffering from anxiety have a stronger negativity bias. Future research could further investigate the role of anxiety in multimodal emotion processing by using a clinical sample.

### **Keywords: Affektive Wissenschaft, Sonstiges**

### **Besser zusammen als allein? – Untersuchung dyadischer Mitgefühlsmeditation**

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Ziel: Meditation wird in verschiedenen mitgefühlsbasierten Interventionen des letzten Jahrzehnts auch in Dyaden ausgeführt. Allerdings wurde noch nicht untersucht, inwiefern der Rahmen – allein oder in der Dyade – einen Effekt hat. In dieser Studie untersuchten wir den Effekt dyadischer Mitgefühlsmeditation auf das Gefühl sozialer Verbundenheit. Sekundäre Zielvariablen umfassten positiven und negativen Affekt sowie die parasympathische Reaktion, erfasst über die Herzratenvariabilität (HRV). Es wurde erwartet, dass eine dyadische Mitgefühlsmeditation die Zielvariablen über den Effekt einer individuellen Mitgefühlsmeditation mit ausschließlich imaginativen Elementen hinaus verbessert.

Methode: In dieser prä-registrierten Studie wurden N = 50 gesunde Paare paarweise den zu vergleichenden Rahmenbedingungen randomisiert zugeordnet. Eine 15-minütige Mitgefühlsmeditation wurde entweder dyadisch, d.h. zusammen mit dem Partner, oder individuell, aber zur selben Zeit mit dem Partner im selben Laborraum, durchgeführt. Aufgrund der dyadischen Datenstruktur wurden Multilevel Modelle getestet.

Ergebnisse: Insgesamt verbessert die Meditation soziale Verbundenheit sowie positiven und negativen Affekt, unabhängig von der Bedingung. Ausschließlich auf Ebene der HRV zeigen sich unterschiedliche Effekte in den zwei Bedingungen über die Zeit: Während die HRV in der individuellen Bedingung signifikant abnimmt, zeigt sich in der dyadischen Bedingung keine solche Veränderung.