Recall of Emotional Words in Individuals with Varying Levels of Anxiety Sensitivity

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Introduction

Anxiety sensitivity (AS) is the fear of anxiety-related sensations, for example, trembling, shaking, and poor concentration.

AS is associated with having one or more anxiety disorder diagnoses, including panic disorder with and without agoraphobia, post-traumatic stress disorder, generalized anxiety disorder, obsessive-compulsive disorder, and social phobia (Krugl, Ayers, & Francis, 2002; McNally, 1992, Rector, Seacan-Shimizu, & Leytman, 2007; Schmidt, Luers, & Jackson, 1999; Schmidt, Zvolensky, & Maner, 2006).

It was hypothesized that people with high AS would recall more negative, socially threatening, and physically threatening words compared to people with low AS.

Procedure

Participants were recruited via either flyers posted throughout a local university or presentations in psychology classes. AS level was determined by a screening that was completed either over the telephone or in person. Only those categorized as having low or high AS at both initial screening and at the time of participation were included in the study. Financial compensation or course credit was given to those who participated.

Measures

Anxiety Sensitivity Index (ASI; Reis, Peterson, Gursky, & McNally, 1986).

The ASI is a 16-item self-report measure that was used to assess AS.

Participants rated the extent to which they agreed with each item using a 5-point Likert scale, from “very little” to “very much.” Total ASI scores range from 0 to 64.

For this study, AS level was based on the mean of a large general population sample (Peterson & Pehl, 1999); scores ≤ one standard deviation below the mean were considered low (i.e., ≤9), whereas scores ≥ one standard deviation beyond the mean were considered high (i.e., ≥29).

Emotional Stroop task

The Emotional Stroop task provides insight into cognitive processes by examining how word meanings can interfere with the naming of the color that the word is printed in (Stroop, 1933).

Participants were given a demographics questionnaire, participants were given a sheet of paper and were asked to write down as many words from the task that they could remember.

Participants

Thirty-seven students participated. 81% (n=30) were female and 19% (n=7) male.

Participants were grouped as having low AS (n=16) or high AS (n=21) by scores on the Anxiety Sensitivity Index (ASI).

Almost one-half of the participants identified as White.

Results

Analysis of variance indicated a significant difference between groups for total number of recalled words (F(1,35)=4.55, p<0.05).

A trend was discovered between groups for the recall of physical threat words (F(1,35)=3.82, p=0.06).

There were no significant differences found between groups for recall of social threat words (F(1,35)=0.045, n.s.) or negative words (F(1,35)=1.97, n.s.).

Conclusions

Unexpectedly, people with high AS recalled fewer total words and fewer physical threat words compared to people with low AS.

Such differences in the recall of emotional words between people may be due in part to initial encoding or memory retrieval biases.

For example, those with high AS may fail to encode certain types of information in an attempt to prevent anxiety.

The finding that the high AS group recalled fewer total words may also be indicative of more general memory deficits in those with greater levels of AS.

Further research is needed to pinpoint the mechanisms that lead to high AS individuals recalling fewer physical threat words and fewer total words.

References


For further information

For more information, or for a PDF version of this poster, contact kyle.gravel@csu.fullerton.edu.