



ELSEVIER

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

Behaviour Research and Therapy 44 (2006) 201–217

**BEHAVIOUR
RESEARCH AND
THERAPY**

www.elsevier.com/locate/brat

Fear-relevant selective associations and social anxiety: Absence of a positive bias[☆]

Matthew Garner^{a,b,*}, Karin Mogg^a, Brendan P. Bradley^a

^aCentre for the Study of Emotion and Motivation, School of Psychology, University of Southampton, Southampton, UK

^bDivision of Clinical Neurosciences, School of Medicine, University of Southampton, Southampton, UK

Received 10 March 2004; received in revised form 12 November 2004; accepted 1 December 2004

Abstract

An illusory correlation paradigm was used to compare high and low socially anxious individuals' initial, on-line and a posteriori covariation estimates between emotional faces and aversive, pleasant and neutral outcomes. Overall, participants demonstrated an initial expectancy bias for aversive outcomes following angry faces, and pleasant outcomes following happy faces. On-line expectancy biases indicated that initial biases were extinguished during the task, with the exception of low socially anxious individuals who continued to over-associate positive social cues with pleasant outcomes. In addition to lacking this protective positive on-line bias, the high social anxiety group reported retrospectively more negative social cues than the low socially anxious group. Findings are discussed in relation to similar evidence from recent interpretive and memory paradigms.

© 2005 Published by Elsevier Ltd.

Keywords: Covariation bias; On-line bias; Faces; Social anxiety

[☆]This research was supported in part by ESRC Studentship Award—R42200034154 held by Matthew Garner. Karin Mogg holds a Wellcome Senior Research Fellowship in Basic Biomedical Science (ref. 051076).

*Corresponding author. School of Psychology, University of Southampton, Highfield Campus, Southampton, SO17 1BJ, UK. Tel.: +44 2380 595926.

E-mail address: m.j.garner@soton.ac.uk (M. Garner).

Introduction

According to recent cognitive theories, biases in information processing play an important role in the etiology and maintenance of emotional disorders (e.g. Beck, 1976; Eysenck, 1997; Williams, Watts, MacLeod, & Mathews, 1997). Specific cognitive models of social anxiety propose that socially anxious individuals make anticipatory and retrospective judgments about social situations that appear consistent with a negative interpretative bias, which serves to maintain and increase social anxiety (Wells & Clark, 1997). Consistent with these predictions, recent evidence suggests that individuals with social phobia exhibit interpretational biases that favor socially threatening information (Amir, Foa, & Coles, 1998a, b; Stopa & Clark, 2000; Wallace & Alden, 1997; see review by Heinrichs & Hofmann, 2001). However, there has been considerably less research into biases in judgments, which may underlie socially anxious individuals' negative appraisal and association of social stimuli with threat.

The illusory correlation/covariation bias paradigm was developed by Tomarken, Mineka, and Cook (1989) to assess individual differences in the association of fear-relevant stimuli with aversive outcomes. In a series of studies, Tomarken et al. (1989) showed high and low spider-fearful participants slides of fear-relevant stimuli (i.e. spiders) and fear-irrelevant stimuli (i.e. flowers and mushrooms) that were followed by either an aversive outcome (electric shock), a tone, or nothing at all (neutral outcomes). Across 72 slide-outcome trials, the three categories of slide were randomly related to the type of outcome that followed the slide. At the end of the sequence, participants were asked to judge the degree of covariation between the various slide categories and outcomes. Results indicated that spider-fearful participants substantially overestimated the association between slides of spiders and the aversive shock outcome relative to both the estimations of low fear participants and the veridical contingency ($p = .33$; Tomarken et al., 1989). Evidence supporting Tomarken et al.'s (1989) findings has been reported in studies using similar paradigms (see also Tomarken, Sutton, & Mineka, 1995). For example, Amin and Lovibond (1997) assessed initial and a posteriori (post-task) covariation estimates between biological phylogenetic (e.g. snake/spiders), technological ontogenetic (e.g. gun/knife) fear-relevant stimuli and electric shocks. Results indicate that at the outset of the experiment, all participants, regardless of prior fear, had elevated expectancies for shock following both phylogenetic and ontogenetic fear stimuli. However, at the end of the experiment, covariation biases were only present between phylogenetic stimuli and shocks in the high fear group (see also Kennedy, Rapee, & Mazurski, 1997).

It has also been proposed that selective associations may play an important role in the maintenance of phobic disorders. For example, de Jong, Merckelbach, and Arntz (1995) reported significant correlations between residual covariation bias after treatment and return of phobic fear two years later (see also de Jong, Merckelbach, Arntz, & Nijman, 1992). These findings are consistent with the view that a tendency to associate threat outcomes with stimuli central to the concerns of anxious individuals is likely to confirm and maintain perceptions of danger.

However, fear-relevant selective associations found in specific animal phobia and also in panic disorder (e.g. Pauli, Montoya, & Markz, 1996) have not been observed in all anxiety disorders. Pury and Mineka (1997) found elevated selective covariation estimates between mutilation slides and aversive shocks, irrespective of participants' prior blood-injury fear. Sutton, Luten, Pury, and Mineka (1990, cited in Öhman & Mineka, 2001) found evidence of covariation bias for fear-

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات