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Journal of Behavior Therapy and Experimental Psychiatry 37 (2006) 4–15
JOURNAL OF behavior therapy and experimental psychiatry
www.elsevier.com/locate/jbtep

Using controlled comparisons in disgust psychopathology research: The case of disgust, hypochondriasis and health anxiety

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Abstract

The present paper describes the results of a study investigating the relationship between measures of disgust and measures of hypochondriasis and health anxiety. The results indicated that (1) there were highly significant correlations between measures of trait disgust and disgust sensitivity and measures of hypochondriasis and health anxiety, (2) the relationship between disgust sensitivity measures and hypochondriasis and health anxiety were still significant even when levels of trait anxiety were controlled for, but (3) controlled comparisons revealed that the measures of disgust also predicted scores on measures of disgust-irrelevant control psychopathologies (claustrophobia and height phobia)—even after trait anxiety had been partialled out. In addition, the series of multiple regressions carried out clearly indicated that trait anxiety and disgust sensitivity appear to be independent constructs each of which have relationships with anxious psychopathologies over and above the effect of the other. The discussion explores the nature of the possible relationships between disgust, hypochondriasis and health anxiety, and also looks at the implications for disgust psychopathology research of using controlled comparisons which indicate the existence of significant relationships between measures of disgust and anxious psychopathologies that, a priori, would be considered to be disgust irrelevant.

Keywords: Disgust; Disgust sensitivity; Trait anxiety; Health anxiety; Hypochondriasis; Claustrophobia; Height phobia; Spider phobia

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doi:10.1016/j.jbtep.2005.09.001

1. Introduction

Research on the disgust emotion has tended to indicate that it is in some way involved in a number of anxiety-based psychological psychopathologies (Phillips, Senior, Fahy & David, 1998; Woody & Teachman, 2000). For example, disgust has been identified as a feature in a variety of specific phobias, including animal phobia generally (Davey, 1994a; Matchett & Davey, 1991), spider phobia specifically (Mulkens, de Jong, & Merckelbach, 1996), blood–injection–injury (BII) phobia (Page, 1994; Tolin, Lohr, Sawchuk, & Lee, 1997), obsessive–compulsive disorder (OCD) (Charash & McKay, 2002; Muris et al., 2000), and eating concerns, where disgust is manifested in disgust of food, the body, and body products (Davey, Buckland, Tantow, & Dallos, 1998).

Disgust is a basic universal emotion characterised by a distinctive facial expression and distinctive cognitive (fear of contamination from disgust-eliciting stimuli), behavioural (distancing oneself from the offensive object), and physiological (nausea) components (Davey, 1994b; Rozin & Fallon, 1987). While it is viewed primarily as a food-rejection response, it is also associated with fear of contamination, and with the negative affect associated with morally or socially unacceptable behaviours and activities (Marzillier & Davey, 2004a).

In each of the psychopathologies in which its involvement has been implicated, disgust is seen as relevant because the psychopathology contains features which involve some of the relevant elements of the disgust emotion, e.g. food rejection (eating disorders), or fear of contamination (obsessive–compulsive washing), and relate quite obviously to some of the putative functions of the disgust response, such as disease-avoidance (Davey, 1994b) or avoidance of body-envelope violations or death (Haidt, McCauley, & Rozin, 1994). These disorders will be termed "disgust-relevant" (DR) anxiety disorders in order to distinguish them from other anxiety disorders where disgust is not thought to be involved. However, although it seems quite clear that disgust is *experienced* in DR disorders, there is still no clear consensus about its exact role in psychopathology, and, in particular, whether it has a causal role in the acquisition, maintenance, or intensity of anxious psychopathology (Marzillier & Davey, 2004b).

One anxious psychopathology in which the role of disgust has yet to be properly explored is health anxiety or hypochondriasis. Hypochondriasis is defined in DSM-IV as 'the preoccupation with the fear of having, or the idea that one has, a serious disease based on the person's misinterpretation of bodily symptoms or bodily functions (American Psychiatric Association (DSM-IV), 1994, p.445). The preoccupation with health in hypochondriasis may be concerned with bodily functions (e.g. heartbeat or sweating), with minor physical abnormalities (e.g. coughing), or with vaguely defined and ambiguous physical sensations (e.g., 'aching veins') (American Psychiatric Association (DSM-IV), 1994, p.463). Hypochondriasis and health anxiety are associated with an excessive fear of death (Noyes, Stuart, Longley, Langbehn, & Hapel, 2002), and clinically diagnosed hypochondriacal patients report substantially more thanatophobic characteristics than non-anxious control participants, and seek medical care more frequently (Kellner, Abbott, Winslow, & Pathak, 1987). Hypochondriasis is also associated with an increase in worry about disease, together with fears of specific diseases, an inability to distract from feeling somatic symptoms, and an increased awareness of somatic symptoms after receiving disease-relevant information (Kellner et al., 1987). There may be other disorders related to physical health in which disgust may play a