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Defensive coping styles in chronic fatigue syndrome

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Abstract

Objective: The cognitive–behavioral model of chronic fatigue syndrome (CFS) proposes that rigidly held beliefs act to defend individuals against low self-esteem. This study is the first to investigate the prevalence of a potential mechanism, the Defensive High Anxious coping style, among individuals with CFS. **Methods:** The study comprised 68 participants (24 CFS; 24 healthy volunteers; 20 chronic illness volunteers). Participants completed the Bendig short form of the Taylor Manifest Anxiety Scale (B-MAS) and the Marlowe–Crowne Social Desirability Scale (MC) in order to ascertain the distribution of participants in each group within the four coping styles defined by Weinberger et al. [J. Abnorm. Psychol. 88 (1979) 369]. **Results:** A greater number of participants in the CFS group (46%) were classified as Defensive High Anxious compared to the two comparison groups [$\chi^2(2)=8.84$, $P=.012$]. **Conclusion:** This study provides support for the existence of defensive coping mechanisms as described by the cognitive–behavioral model of CFS. Furthermore, it has been suggested that this particular coping style may impinge directly on physical well being through similar mechanisms as identified in CFS, and further research linking these areas of research is warranted.

Keywords: Chronic fatigue syndrome; Coping style; Defence mechanisms

Introduction

Chronic fatigue syndrome (CFS) is a disorder characterised by a principal complaint of fatigue accompanied by substantial functional impairment [2]. Sharpe [3], following Surawy et al. [4], described a cognitive–behavioral model of CFS that implies that people with CFS have low underlying levels of self-esteem which are protected by rigid defence mechanisms. This has not, however, been addressed in the literature to date.

Similarities are apparent between the cognitive model of CFS and characteristics of defensive coping styles. Weinberger et al. [1] proposed a fourfold classification of individuals based on their coping styles including Repressors (low anxiety–high defensiveness) and Defensive High Anxious (high anxiety–high defensiveness). Some similarities are apparent between repressive coping and the cognitive model of CFS. For example, in both cases, it is hypothesized that beliefs are formed which value low levels of negative affect and these beliefs lead to a lifestyle characterized by not asking for help and putting on a brave face [1,3].

Unlike Repressive Copers, however, people with CFS report high levels of anxiety [5,6]. It is hypothesized here that the similarities described above may reflect high levels of defensiveness in the context of high anxiety among people with CFS, that is, Defensive High Anxious coping. This coping style is generally of low prevalence and hence has received little direct investigation. A number of studies have suggested that a Defensive High Anxious style may impinge on physical health [7,17]. A hypothesized mechanism is via the hypothalamic–pituitary–adrenal axis, which has also been implicated in CFS [8–10].

The present study investigates the prevalence of the Defensive High Anxious coping style among participants with CFS. A comparison of a group of people with a different chronic illness, insulin-treated diabetes mellitus, is included in the present study to evaluate the extent to which this coping style is a response to chronic illness. Like

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CFS, diabetes is a "hidden" condition that is not readily apparent to other people and requires significant regulation of behavior and imposes restrictions on lifestyle.

The present study addresses the following hypothesis: participants with CFS will display a greater tendency to hold a Defensive High Anxious coping style, characterized by high levels of reported trait anxiety and high levels of defensiveness compared to a healthy control group and comparison chronic illness group.

Method

Participants

CFS participants

Fifty-eight patients from three tertiary referral centers that specialize in the assessment and treatment of CFS were invited to participate in the study. Twenty-nine patients responded to the letter (50%). All but five participants fulfilled Oxford Diagnostic Criteria for CFS [11], leaving 24 with CFS.

Chronic illness comparison group

One hundred twenty-five patients were invited to participate in the study via three tertiary referral centers that specialize in the treatment of diabetes. Twenty eligible patients responded to the letter and took part in the study (16%). All patients had been diagnosed with diabetes for at least 6 months.

Healthy comparison group

Twenty-four participants formed a healthy comparison group, recruited primarily via posters and e-mail advertisements within the University of London, attracting students and members of staff. Others were recruited via word of mouth.

All participants were between the ages of 18 and 30 years and spoke English as their first language. Participants were not involved in any form of psychological therapy, including cognitive–behavior therapy. For participants who were prescribed mood-altering medication, this had not been altered within the 2 months preceding assessment.

Measures

Bendig short form of the Taylor Manifest Anxiety Scale (B-MAS) [12]

The Manifest Anxiety Scale (MAS) [14] and the B-MAS [13] are the most frequently used measures for measuring trait anxiety in order to identify defensive coping styles [14]. The B-MAS is comprised of the 20 most consistently valid items from the 50-item MAS and the scores are highly correlated (.93).

Marlowe–Crowne Social Desirability Scale (MC) [15]

The MC is invariably used alongside an anxiety measure such as the B-MAS, in order to identify defensive coping styles [14]. It is comprised of 33 statements to which the participant must respond "True" or "False." The number of socially desirable responses is totalled to give a score out of 33.

Identifying coping style with the MAS and MC

Weinberger et al. [1] used the MC and the MAS in order to identify four coping styles: Repressive Copers (high MC–low MAS), Low Anxious (low MAS–low MC), High Anxious (high MAS–low MC), and Defensive High Anxious (high MAS–high MC). Validity of the coping constructs has been supported by differential responses of the groups on various self-report, behavioral, and physiological tasks [1,16]. Studies of patient groups have tended to use median splits on trait anxiety and defensiveness scores to compare the distribution of coping styles (e.g., Ref. [7]).

Results

Table 1 describes the participants. A significant group effect was found on the MAS [$F(2,65) = 11.58$, $P < .001$]. Post hoc tests, controlling for Type 1 error, revealed significantly higher scores in the CFS group, compared to the diabetes (Tukey HSD, $P = .003$) and the healthy comparison groups (Tukey HSD, $P < .001$). The groups did not differ significantly on the MC [$F(2,65) = 0.84$, $P = .44$].

The groups were divided into four coping styles, using the median splits method. B-MAS scores greater than or

Table 1
Demographic information

	CFS ($n = 24$)	Diabetes ($n = 20$)	Healthy ($n = 24$)	Statistic
Gender [% females (n)]	83.3 (20)	50 (10)	83.3 (20)	$\chi^2(2) = 7.90$*
Ethnicity [% White UK (n)]	95.8 (23)	75 (15)	62.5 (15)	$\chi^2(2) = 7.90$*
Occupation [% employment/education (n)]	62.5 (15)	100 (20)	95.8 (23)	$\chi^2(2) = 15.51$***
Education [% further education (n)]	79.2 (19)	90 (23)	95.8 (18)	$\chi^2(2) = 3.30$
Age, years (S.D., range)	24.73 (4.07, 18–30.67)	26.51 (2.89, 19.42–30.58)	23.08 (3.35, 18.75–30.58)	$F(2,65) = 5.21$**
Illness duration, months (S.D., range)	43.42 (26.40, 5–108)	131.55 (82.57,22–271)	N/A	$F(1,42) = 24.45$***

* $P < .05$.
** $P < .01$.
*** $P < .001$.