PERGAMON

Personality and Individual Differences 35 (2003) 877–887

PERSONALITY AND INDIVIDUAL DIFFERENCES

www.elsevier.com/locate/paid

The vulnerability status of neuroticism: over-reporting or genuine complaints?

Maarit Johnson*

Department of Psychology, Stockholm University, SE-106 91 Stockholm, Sweden

Received 23 March 2001; received in revised form 14 August 2002; accepted 9 October 2002

Abstract

Neuroticism is widely documented to reflect an exaggerated reporting of physical symptoms, due to an over-sensitive focus on internal stimuli in individuals high in this trait. This study scrutinized the responses to 409 retrospective health reports to see if negative affect (NA), indicating neuroticism, was differentially related to different types of physical complaints. The role of other personality risk factors, related to neuroticism and coping style were also examined. The findings show that high NA was uniquely related only to diseases of tension type, such as high blood pressure, migraine, or neck pain. Of the other factors, which all correlated with NA, hostility, self-critical attitude, and coping were uniquely related to these same complaints. It is concluded that neuroticism has a more genuine vulnerability potential to disease.

Keywords: Self-reports; Neuroticism; Hostility; Coping; Disease type

1. Introduction

A significant part of personality variation can be ascribed to traits concerning emotional reaction patterns (Claridge & Davis, 2001). One such broad factor is neuroticism reflecting emotional distress, tendency to worry, hypervigilance, and proneness to psychopathology. Findings suggest that neuroticism, also called negative affect, is related to a wide range of dysfunctions and disease such as depression, pain syndromes, eating disorders, psychosomatic complaints, and poor coping (Costa, 1987; Davis, 1997; Kentle, 1989; O'Brien & DeLongis, 1996). However, it is widely documented that when completing retrospective health-checklists individuals high in neuroticism and negative mood states *rate* themselves as poorer in health than those low in neuroticism and

* Tel.: +46-8-163915; fax: +46-8-159342.
E-mail address: mtjn@psychology.su.se (M. Johnson).

0191-8869/02/$ - see front matter
PII: S0191-8869(02)00303-3

negative affect (Fahrenberg, 1992; Feldman, Cohen, Doyle, Skoner, & Gwaltney, 1999; Watson & Pennebaker, 1989). Consequently, neuroticism is thought to affect an individual's subjective health more than objective health. The present work is an attempt to clarify whether neuroticism can be seen as a more genuine risk factor for physical disease.

1.1. Neuroticism and symptom perception

Cohen, Doyle, Skoner, Fireman, Gwaltney, and Newson (1995) found that healthy individuals high in neuroticism when exposed to common cold virus reported more symptoms than those low in neuroticism, after objective signs of disease were controlled. In line with others (e.g. Pennebaker, 1982) they argue that the over-reporting of physical complaints is primarily due to a heightened symptom perception precipitated by neuroticism. Indeed, Gray (1982) proposed that the phenomenon occurs due to an attentional bias created by an overactive behavioural inhibition system (BIS) that treats all stimuli as important. This attentional focus then lowers the threshold for defining bodily sensations as symptoms (Cioffi, 1991).

Others (e.g. Larsen, 1992) argue for memorial mood-congruent recall processes, which operate to enhance or inflate retrospective reports of illness in individuals high in neuroticism. In this respect, those high in neuroticism are thought to recall symptoms as worse than they actually were, and therefore they report retrospectively more frequent and more severe symptoms than those low in neuroticism. More recently, a higher level of self-focused attention (private self-consciousness) is mentioned as a possible mediating factor underlying the over-reporting, especially in women (Williams & Wiebe, 2000). Notably, women have consistently reported themselves to be in poorer health than men (Gijsbers Van Wijk & Kolk, 1997) and neuroticism has appeared higher (Lynn & Martin, 1997) and more related to symptoms in women than in men (Gijsbers Van Wijk & Kolk, 1997). However, despite some gender specific findings, the notion of symptom sensitivity due to a greater self-attention or negative recall still suggests that those high in neuroticism over-report *all* physical diseases, regardless the objective conditions. By scrutinizing the responses on a self-report health measure, an aim of the present study was to determine if neuroticism is systematically related to certain types of physical complaints more than to others.

1.2. Neuroticism and vulnerability

Apart from the contribution of neuroticism and negative mood to symptom perception there is also support for a more genuine vulnerability status of this disposition via its role as moderator of other stress variables (e.g. Claridge & Davis, 2001; Jorgensen, Johnson, Kolodziej & Schreer, 1996). For example, the presence of 'bad mood' is thought to transform many adaptive features to maladaptive (e.g. extraversion to unstable impulsivity) which makes neuroticism an interesting moderator influencing behaviour and health outcomes (Claridge & Davis, 2001).

Neuroticism is also thought to play a mediating role in health processes by its relation to several well-known 'toxic' variables. In support of this view, there is evidence to suggest that neuroticism reflects hostility (Mc Crae & Costa, 1986; Watson & Clark, 1984), external locus of control (Eysenck & Eysenck, 1985), and a self-critical attitude (Gunthert, Cohen, & Armeli, 1999) with accompanying feelings of guilt or doubts of own competence (Cole, Peeke, Dolezal, Murray, & Canzoniero, 1999). Moreover, others have argued for two types of neurotics namely a passive/anxious (dependent)