Neuroticism is a fundamental domain of personality with enormous public health implications

Neuroticism is the trait disposition to experience negative affects, including anger, anxiety, self-consciousness, irritability, emotional instability, and depression[1]. Persons with elevated levels of neuroticism respond poorly to environmental stress, interpret ordinary situations as threatening, and can experience minor frustrations as hopelessly overwhelming. Neuroticism is one of the more well established and empirically validated personality trait domains, with a substantial body of research to support its heritability, childhood antecedents, temporal stability across the life span, and universal presence[1,2].

Neuroticism has enormous public health implications[3]. It provides a dispositional vulnerability for a wide array of different forms of psychopathology, including anxiety, mood, substance, somatic symptom, and eating disorders[1,4]. Many instances of maladaptive substance use are efforts to quell or quash the dismay, anxiousness, dysphoria, and emotional instability of neuroticism. Clinically significant episodes of anxiety and depressed mood states will often represent an interaction of the trait or temperament of neuroticism with a life stressor[1].

Neuroticism is comparably associated with a wide array of physical maladies, such as cardiac problems, disrupted immune functioning, asthma, atopic eczema, irritable bowel syndrome, and even increased risk for mortality[2]. The relationship of neuroticism to physical problems is both direct and indirect, in that neuroticism provides a vulnerability for the development of these conditions, as well as a disposition to exaggerate their importance and a failure to respond effectively to their treatment.

Neuroticism is also associated with a diminished quality of life, including feelings of ill-will, excessive worry, occupational failure, and marital dissatisfaction[5]. High levels of neuroticism will contribute to poor work performance due to emotional preoccupation, exhaustion, and distraction. Similar to the duel-edged effect of neuroticism on physical conditions, high levels of neuroticism will result in actual impairment to marital relationships but also subjective feelings of marital dissatisfaction even when there is no objective basis for such feelings, which can though in turn lead to actual spousal frustration and withdrawal.

Given the contribution of neuroticism to so many negative life outcomes, it has been recommended that the general population be screened for clinically significant levels of neuroticism during routine medical visits[1,6]. Screening in the absence of available treatment would be problematic. However, neuroticism is responsive to pharmacologic intervention[1]. Pharmacotherapy can and does effectively lower levels of the personality trait of neuroticism. Barlow et al[7] have also developed an empirically-validated cognitive-behavioral treatment of neuroticism, called the Unified Protocol (UP). They have suggested that current psychological treatments have become overly specialized, focusing on disorder-specific symptoms. The UP was designed to be transdiagnostic. Recognizing the impact of neuroticism across a diverse array of physical and mental health care concerns, the authors of the UP again note that "the public-health implications of directly treating and even preventing the development of neuroticism would be substantial"[7].

Neuroticism has long been recognized since the beginning of basic science personality research and may even be the first domain of personality that was identified within psychology[1]. Given its central importance for so many different forms of mental and physical dysfunction, it is not surprising that neuroticism is evident within the predominant models of personality, personality disorder, and psychopathology.

Neuroticism is one of the fundamental domains of general personality included within the five-factor model or Big Five[2]. It is also within the dimensional trait model included in Section III of the DSM-5 for emerging measures and models[8]. This trait model consists of five broad domains, including negative affectivity (along with detachment, psychoticism, antagonism, and disinhibition). As expressed in the DSM-5, "these five broad domains are maladaptive variants of the five domains of the extensively validated and replicated personality model known as the 'Big Five' or Five Factor Model of personality"[8].

Neuroticism is likewise aligned with the negative affective domain included within the dimensional trait model of personality disorder proposed for the ICD-11[9]. Finally, it is also evident within the transdiagnostic Research Domain Criteria (RDoC) of the National Institute of Mental Health, as RDoC negative valence encapsulates such constructs as fear, distress, frustration, and perceived loss[10]. It would be inaccurate to suggest that RDoC negative valence is equivalent to neuroticism, but it is self-evident that they are closely aligned.

Currently, there is considerable interest in the general factors of psychopathology, personality disorder, and personality. To the extent that degree of impairment and dysfunction (which largely defines the general factors) is associated with level of distress and dismay, which is quite likely to be the case, we would propose that neuroticism will explain a substantial proportion of the variance in those general factors.

In sum, neuroticism is a fundamental domain of personality that has enormous public health implications, impacting a wide array of psychopathological and physical health care concerns. It contributes to the occurrence of many significantly harmful life outcomes, as well as impairing the ability of persons to adequately address them. It has long been recognized as one of the more important and significant domains of personality and is being increasingly recognized as a fundamental domain of personality disorder and psychopathology more generally.

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DOI:10.1002/wps.20411