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Metacognition, perceived stress, and negative emotion

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Abstract

The present study explored the relationships between metacognition, perceived stress and negative emotion. A convenience sample of 420 participants completed the following questionnaires: metacognitions questionnaire 30 (MCQ-30), perceived stress scale (PSS), and hospital anxiety and depression scale (HADS). A cross-sectional design was adopted and data analysis consisted of correlation and structural equation modeling analyses. Metacognition was found to be positively and significantly correlated with both perceived stress and negative emotion (anxiety and depression). Positive and significant correlations were also observed between perceived stress, anxiety and depression. Structural equation modeling was used to test a moderation model in which metacognition moderates the relationship between perceived stress and negative emotion. The results supported this hypothesis. These preliminary results would seem to suggest that individual differences in metacognition are relevant to understanding the link between perceived stress and negative emotion.
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1. Introduction

According to Lazarus (Lazarus, 1999; Lazarus & Folkman, 1984) the stress process is initiated with the construal of an event as an imposition. Individuals appraise events differently making some more susceptible to negative stress outcomes (Vollrath & Torgersen, 2000). Stressor appraisals result in threat escalation when individuals believe they have inadequate resources to meet or challenge external demands (Lazarus & Folkman, 1984).

Cognitive appraisal is a key variable in stress reactions (Lazarus & Folkman, 1984). It involves two processes: primary and secondary appraisal. Primary appraisal refers to an individual's evaluation of the significance of an event as stressful, positive, controllable, challenging or irrelevant (Lazarus & Folkman, 1984). Secondary appraisal refers to the individual's evaluation of his or her own resources and options for coping with the stressful situation. Coping refers to the cognitive and behavioural strategies employed to manage a problematic person–environment relationship (Folkman & Lazarus, 1985). Actual coping efforts aimed at regulating the relationship give rise to outcomes of the coping process. Outcomes of maladaptive coping may include experiencing symptoms of both anxiety and depression (Garnefski & Kraaij, 2006; Garnefski, Boon, & Kraaij, 2003; Garnefski et al., 2002).

Perceived stress can be conceptualized as the degree to which a situation in one's life is appraised as stressful (Cohen, Kamarck, & Mermelstein, 1983) and therefore as an outcome of primary and secondary appraisals (Lazarus, 1999). In other words, perceived stress is a state outcome reflecting the global evaluation of the significance and difficulty in dealing with personal and environmental challenges. Research evidence indicates that perceived stress is associated to both anxiety and depression (e.g., Bergdahl & Bergdahl, 2002; Chang, 1998; van Eck & Nicolson, 1994).

No published research, to date, has examined the possible role of individual differences in metacognition in moderating the relationship between perceived stress and negative emotion. Metacognition can be defined as "stable knowledge or beliefs about one's own cognitive system, and knowledge about factors that affect the functioning of the system; the regulation and awareness of the current state of cognition, and appraisal of the significance of thought and memories" (p. 302; Wells, 1995). Brown (1987) distinguishes between two typologies of metacognition: (1) knowledge about cognition – that which is knowable and reportable; and (2) the regulation of cognition – the planning, evaluating, monitoring and regulation of activities that affect cognitive processes.

In the area of adult psychopathology the study of these types of metacognitive processes is mainly associated with the self-regulatory executive function (S-REF; Wells & Matthews, 1994, 1996) theory. This theory offers a detailed conceptualization of how multiple metacognitive factors are involved in development and persistence of psychological disorders. According to the S-REF (Wells & Matthews, 1994, 1996) theory metacognitive knowledge (metacognitions) predisposes individuals to develop response patterns to thoughts and internal events that are characterised by heightened self-focused attention, recyclical thinking patterns, avoidance and thought suppression, and threat monitoring. In other words, metacognitions are believed to play a fundamental role in influencing the choice of maladaptive coping strategies.

The role of metacognitions in psychopathology has been explored using the metacognitions questionnaire (Cartwright-Hatton & Wells, 1997; Wells & Cartwright-Hatton, 2004).