Brosschot et al. in this issue [1] make a cogent and compelling argument for researchers to pay more attention to the role of unconscious processes. They argue that the prolonged physiological activity of the type that produces wear and tear on the body and eventual stress-related illness may be more due to unconscious worry and distress than researchers have previously recognized. This unconscious worry or rumination by individuals may be in anticipation of a stressful event or continue long after the episode has passed. They propose that a focus on the nature of stressor itself may be less important than rumination and worry about the stressor, much of which occurs unconsciously. Currently, the majority of physiological evidence for prolonged activation seems to apply to cardiovascular indices rather than HPA activity. This may reflect the limited work in this area so far, but may also indicate the type of disease processes affected by perseverative cognition.

The fact that unconscious processes have not featured prominently in current models of stress is probably related to the historical roots of stress research. The origins of stress research have been based in animal and laboratory work and this has focused attention on measuring the bodily reactions associated with threat. This work has led to a much clearer understanding of the biological processes that occur in the face of a stressor but less attention has been given to the role of the cognitive representation of threat or to individual differences in the response to similar stressful events [2].

The reluctance of researchers to examine a wider role of unconscious processes in the stress response is also likely to be related to the negative associations of the unconscious with Freudian psychology. Psychoanalysis has rightly been criticised for unsubstantiated theory, poorly defined concepts and circular arguments, and yet, the unconscious remains the elephant in the room. It looms large and important in explaining physiological responses to stress, but is extremely difficult to capture or measure in the wild.

So what needs to done to move research forward in this area? An important first step is coming to an operational definition of perseverative cognition. It is necessary to define at what point does thought or worry become perseverative and maladaptive. This is important because conscious and unconscious reflection on complex stressors is warranted to a certain extent in order for them to be managed or resolved. So how much is too much? Also, it could be argued that in the context of chronically stressful situations, some degree of perseverative thought could be adaptive [3].

Another key area is measurement. In many ways, stress research is the antithesis of work investigating the role of the unconscious. The precise measurement of heart activity, blood pressure and stress hormones contrasts markedly with the array of fuzzy techniques developed to access unconscious processing. Brosschot et al. [1] rightly criticize the reliance on subliminal perception and point to work on unconscious problem solving paradigms as a possible way forward [4]. However, in order to access unconscious worry prior to, or following, a specific stressful event, more creative and “real time” techniques will be necessary [5]. The challenge of measuring perseverative cognition during sleep will be considerable and it is not clear whether unconscious activation or worry during sleep is even comparable or the same process when the individual is awake.

The role of individual differences in unconscious perseverative cognition is likely to be important. It seems probable that the tendency to unconsciously ruminate about stressful events will vary, like most psychological traits, around a normal curve. It also seems likely that individuals
will differ in the nature of the stressor likely to set off unconscious perseverative cognition. For example, low self esteem individuals may be more sensitive to threats with an personally evaluative element. The stability of this unconscious tendency, and how it relates to existing personality measures such as the “Big Five,” especially neuroticism, are important areas for future work.

How easily perseverative cognition can be manipulated is also an obvious area of investigation. Brosschot and colleagues point to several promising techniques including emotional writing, mindfulness and other cognitive techniques designed to inhibit rumination and direct attention away from threatening thoughts. These interventions may be useful but their application in this area will await further developments in conceptualization and measurement of perseverative cognition. The paper by Brosschot et al. [1] challenges researchers to consider the role of the unconscious in the stress response. However, unravelling the importance of perseverative cognition will require considerable creativity and the amalgamation of theoretical and experimental work.

References