

The Role of Neuroticism in Test and Social Anxiety

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SARASON AND SARASON (1986) have suggested that the cognitive components of worry and task-relevant thinking that appear to be important in test anxiety may function in a similar way in social anxiety. They reported relations between scales measuring test anxiety (e.g., the Reaction to Tests Scale) and social behavior (e.g., the Reaction to Social Situations Scale) for several samples in the order of .50. The purpose of our study was to examine whether neuroticism was related to anxiety in different evaluative contexts. We examined the relations of neuroticism, shyness, and test anxiety in a group of undergraduate students immediately prior to a final, cumulative exam in an introductory psychology statistics class. Unlike previous studies that examined the relations between these measures in a laboratory setting, we collected our data during a highly salient testing situation in which there was a real expectation that participants' performances would be evaluated.

The participants were 20 male and 27 female undergraduate students at the University of Maryland, College Park. Their ages ranged from 18 to 32 years ($M = 20.64$, $SD = 2.34$). The participants were members of an introductory psychology statistics class who volunteered to participate in the study. Each participant completed a questionnaire packet immediately prior to taking the final exam. The packet contained the short version of the Eysenck Personality Questionnaire (EPQ; Eysenck, Eysenck, & Bartlett, 1985), which includes the Neuroticism and Extraversion Subscales, the five highest loaded shyness items (Bruch, Gorsky, Collins, & Berger, 1989) from the revised Cheek and Buss Shyness Scale (Cheek, 1983), and three Likert-type questions related to feelings experienced

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while taking tests, which were as follows: (a) "I tend to feel anxious before taking exams"; (b) "I feel nervous while taking exams"; and (c) "I feel nervous about taking the statistics final exam today." It is important to note that the reason we used only three items to assess test anxiety, rather than readily available questionnaires measuring test anxiety, was that we wanted to make minimal time demands on the participants given the nature of the testing situation. The five shyness and the three test anxiety items were rated on a scale from 0 (*extremely uncharacteristic*) to 4 (*extremely characteristic*).

We computed Pearson correlations among the four measures collected: the Neuroticism Subscale, the Extraversion Subscale, the Cheek shyness measure, and a composite measure of test anxiety we derived by summing the three test anxiety items. The analyses revealed that neuroticism was significantly related to test anxiety, $r = .27$, $p = .03$, and modestly related to shyness, $r = .22$, $p < .07$. Adults who tended to report high amounts of neuroticism reported a high degree of anxiety in response to tests in general and the anticipated testing situation in particular as well as a high degree of anxiety in response to social situations. There was an inverse relation between shyness and extraversion, $r = -.27$, $p = .03$. Adults who were shy tended to report that they were low on extraversion. The results of our study suggest that neuroticism may underlie anxiety in different evaluative contexts. Our findings extend many previous studies using laboratory ratings of these measures to a real-world testing situation in which the evaluative situation and potential consequences of negative evaluations were particularly salient.

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