Personality traits and goal orientation have been reported to have associations with test anxiety. However, the mediation role of goal orientation between the Big Five personality traits and cognitive test anxiety (CTA) needs further exploration. Based on data from 458 university students, regression and mediation analyses were conducted to test associations between five personality factors (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism), two types of goal orientations (extrinsic and intrinsic), and CTA. Direct negative relationships were found between two personality factors (Openness and Conscientiousness) and CTA. Direct positive associations were found between Neuroticism and Extrinsic Goal Orientation (EGO) and CTA. Examination of model fit indices revealed a partially mediated model examining the relationships among personality variables, goal orientation, and cognitive test anxiety was the only model with acceptable fit indices. Overall, 18.7% of the variance in cognitive test anxiety could be attributed to personality when mediated by goal orientation. Results suggested that students who reported being more extrinsically motivated were identified with more conscientious traits had higher cognitive test anxiety levels.