P-375 - ASSESSING TRAIT ANXIETY IMPACTS ON EFFECTIVE PERFORMANCE AND PROCESSING EFFICIENCY OF WORKING MEMORY

N.Nazarboland¹, P.Azadfallah²

¹Department of Psychology, ²Tarbiat Modares University, Tehran, Iran

In this study we assessed the effects of Gray's description of trait anxiety on effective performance and processing efficiency of working memory. To do so, a sample of female students (n=793) performed Eysenck Personality Questionnaire and Carver and White's Approach/Avoidance scale. 15 subjects whose scores were simultaneously in the upper distribution of Neuroticism and lower distribution of Extraversion (N+E-) were selected as high trait anxiety group (Anx+) and low trait anxiety group (Anx-), consisted of 15 subjects with higher scores of Extraversion and lower scores of Neuroticism (N-E+). Then they performed working memory tasks package involved 1-back, Paced Auditory Serial Adding Test(PASAT), forward and backward Digit Span. Total scores in each task were taken as the indicator of effectiveness of performance and reaction times in 1-back were taken as the indicator of neural effort which shows the processing efficiency. Data were analyzed using T-test for independent samples. Results revealed that high trait anxiety subjects' working memory were impaired both in effective performance and processing efficiency of central executive system, but phonological loop performance was not impaired significantly. Results supported Processing Efficiency Theory.