

FEASIBILITY & TEST-RETEST RELIABILITY OF A COMPUTERIZED NEURO-COGNITIVE TEST

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ABSTRACT

Reaction time (RT) and anticipation skills are important neuro-cognitive indicators. The purpose of the present study was to investigate the feasibility of using the costume design computer based neuro-cognitive test as an indicator of neuro-cognition ability and test-retest reliability of above clinical test. Fifteen healthy right-handed female students, volunteered for the present experiment. We designed and constructed a simple, portable and inexpensive system based on software engineering methods as a neuro-cognitive test. Measurement of test-retest reliability was taken by an independent physiotherapist (time interval 1 week). Yielding correlation coefficients demonstrated high correlation for the anticipatory of high speed and low speed of ball index, moderate correlation for auditory choice RT index, high correlation for auditory complex choice RT index, high correlation for visual complex RT index and moderate correlation for visual complex choice RT index.

The computerized RT test proved to be a reliable instrument that use in assessment of brain signal processing and cognition behaviour.

Keywords: Neuro-Cognitive, Feasibility, Reliability.