

## ABSTRACT

The present study aims to Adapt, modify and develop norms of the Hand Test in Pakistan. A sample of 500 participants (270 males & 230 females) age ranged from 11 to 80 years ( $M=34.44$  &  $SD=17.34$ ) was recruited from various cities of Pakistan. The sample belonged to various economic classes which includes earnings from up to 20,000 to above 1 lac Pakistani Rupees. Participants were further bifurcated into four groups which include 350 normal who were further divided age wise into four groups. Group one age ranged from 11 to 20 years. Group two age ranged from 21 to 40 years. Group three age ranged from 41 to 60 years. Group four 61 years and above. The second group consisted of 50 maladjusted. The third group consisted of 50 neurotic/anxiety related disorders who were categorized into generalized anxiety, obsessive compulsive and phobic. Whereas, the fourth group consisted of psychotics who were further categorized into schizophrenic, major depression and bipolar. Cross sectional research design was implied, purposive sampling technique was used for data collection. The study was carried out phase wise, in phase one scoring booklet of Hand Test (Wagner, 1983) was translated from English into Urdu language using back translation method, comprising fourteen stimuli (10 original and Four adapted). A pilot study was carried out to adapt four new stimuli out of a set of 10 on the criterions (a) their ability to generate responses in more scoring categories (b) varied range of responses and these were placed from stimuli nine to thirteen. Licence to use the Modified Hand Test was obtained from Western Psychological Services. In phase two reliability and validity studies were carried out to establish psychometric properties of the Modified Hand Test with promising results test-retest reliability ( $r = .39$  to  $.83$ ), inter-scorer reliability ( $r = .87$ ), split- half reliability was determined while dividing stimuli into odd and even

categories and it was found in the range of  $\alpha=.04$  to  $.84$  for failure (in neurotic/anxiety related disorder group) to bizarre (in psychotic group). Construct Validity came out for interpersonal with environmental ( $r=.43$ ). Predictive validity of socially desirable traits with academic grades remained moderate. In phase three normative data, percentile ranks and z scores were computed for various scoring categories which facilitated in determining normal ranges of scores across group of samples for age groups and gender for normal group. Qualitative analysis based on content was computed through frequency counts; certain new areas were explored like religiosity, oppositional, introjection, projection need for altruism and affiliation. One-way analysis of variance (ANOVA) was computed for different groups of participants, age groups and economic classes for normal group. Results were significant across main domains as well as sub categories at  $.01$  and  $.05$  level of significance. Analysis of results depicted that the Modified Hand Test provided confirmation to normative data and studies reported by its author and other researchers. Furthermore, it explored new dimensions of personality.