Lecture

Hopkins Verbal Learning Test-Revised: Preliminary Greek normative data for research use

Athanasia Liozidou[1], Michalis Fragkoulakis[2], Ioannis Zalonis

[1]Biomedical Research Foundation of Athens Academy, [2]Ludwig-Maximilians-University Munich, [3] Neuropsychological Laboratory, 1st Department of Neurology, University of Athens
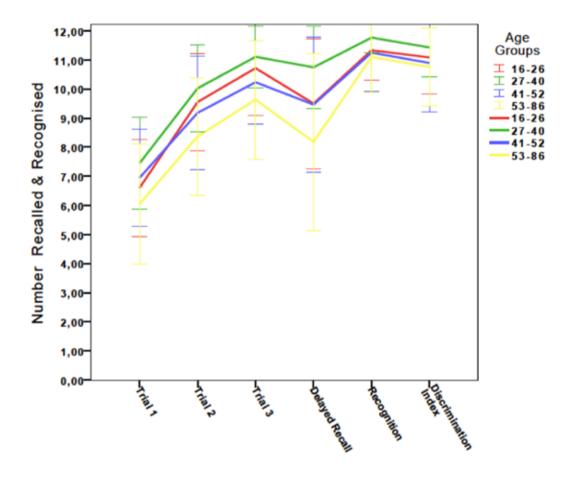
Abstract

Hopkins Verbal Learning Test-Revised (HVLT-R) is a brief test for the measurement of verbal memory and learning that is frequently used in neuropsychological testing. The HVLT-R is available in six equivalent forms and is recommended for repeatable neuropsychological testing beacuse it avoids the learning effect at retest. Moreover, it is a valid and reliable screening test for mild dementia and is well tolerated by patients. In light of the asbsence of a Greek standardised version, we aimed to provide normative data for a sample of community-dwelling Greek adults and adolescents. The research team recruited healthy individuals of a broad age range with various education levels. Individuals were informed for the purpose of the study and were interviewed for their medical history and their ethnicity and maternal language. Individuals with a positive psychiatric and/or neurological history or history of substance abuse, foreigners and immigrants whose dominant language was not the Greek language as well as individuals with a score <24 in the Mini Mental Status Examination and those with uncorrected vision or hearing or prior knowledge of the test, were excluded from the study. Form 6 of the HVLT-R was translated and adapted taking into account the Greek lexical and semantic characteristics of the items. Two hundred and twelve healthy Greek participants enrolled in the study (age 40.3±15.7, 88 males, education in years 13.9±2.7). The HVLT-R was administered as part of a broad neuropsychological battery. Statistical analyses included multiple regression analyses as well as descriptive and relative descriptive analyses. We set the alpha level at 5%. Education proved to be a significant predictor in all HVLT-R indices. Age was a significant factor for most of scores, while female participants showed significantly better performance in the Trial 2 of the test. Normative data were stratified by education level, age and sex. Four age groups were formed: 16-26, 27-40, 41-52, 53-86 years old. Of the four age groups, the 27-40 year old age group showed the optimal performance (Figure 1). Future directions include sample collection to separate participants over 53 years old, validation of the test to provide values of sensitivity and specificity, translation and adaptation of the other forms of the test and comparison of performance with age and education matched patient groups.

Corresponding Author: Hopkins Verbal Learning Test-Revised: Preliminary Greek normative data for research use, Athanasia Liozidou, 1Biomedical Research Foundation of Athens Academy,, e-mail: athanasialiozidou@gmail.com

Corresponding Author:
Hopkins Verbal Learning Test-Revised: Preliminary Greek normative data for research use,
Athanasia Liozidou, 1Biomedical Research Foundation of Athens Academy, e-mail: athanasialiozidou@gmail.com