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THESES

NORMATIZATION OF 702 IMAGES SET FROM THE INTERNATIONAL AFFECTIVE PICTURE SYSTEM (IAPS) IN A BRAZILIAN ELDERLY SAMPLE FOR EMOTION AND ATTENTION TESTING (ABSTRACT)*. **THESIS. SAO PAULO, 2005.**

WEYLER GALVÃO PORTO **

Neuropsychological testing has shown aging and cultural particularities. Elderly can not always have advantage from results obtained in young tailored researching. IAPS was standardized for young population study in Brazil, Spain and United States of America. Meanwhile, there is no notes in the scientific international literature concerning normatization of the IAPS/SAM for geriatrics and gerontological purposes.

Objective: 1) To obtain an IAPS/SAM version for geriatric and gerontological research; 2) To compare elderly´s valence and arousal scores to the ones obtained from the studies done in a brazilian and american young population.

Subjects: 187 clinical and cognitively healthy elderly brazilian sample. *Material:* 702 images from the International Affective Picture System (IAPS). *Method:* Subjects ranked the IAPS images according to the *Instruction Manual and Affective Ratings* (Lang et al, 1999). Then, the arousal and valence scores were compared to the scores obtained in american and brazilian studies.

Results: There is a difference of the mean of the means obtained for mature women when compared to the mature men, during avaluation of the valence of the images from the IAPS (Mann-Whitney[MW] Z=5,34; p=0,00). Same effect occurs for the arousal level (MW Z=-4,53; p=0,00) [α2=0,05 degree of significance]. There is a strong negative correlation, statistically significant, between affective valence and arousal for the male elderly and female. Respectively (rho de Spearman) $\geq r_s$= –0,66, p=0,00 and r_s=–0,8, p=0,00. The non-parametric analisys of variance between elderly sample (male+female), young Brazilians and Americans shows no statistical difference in valence (Kruskal-Wallis (KW) H=0,24, p=0,9). Nevertheless, it occurs for arousal level (KW≥ H=39,47, p=0,00). The average arousal level for the elderly group is smaller than the young Brazilians. Yet, not statistically significant. Correlation between affective valence and arousal is strong and negative for the elderly and the young brazilian samples (r_s=–0,8 e r_s=–0,8 respectively). χ^2 (Qui-square) between the young brazilian sample expected frequency of IAPS images, does not show statistical difference from the elderly´s observed frequency (p=0,114). Same does not occur for the arousal level between both groups (χ^2 p=0,01)

Conclusion: Results points out to the fact that there is a statistical difference for the arousal level between elderly and young brazilian sample. The is no difference for the affective valence. Arousal situations for the elderly are not the same for the youngsters. Arousal level and not affective valence is determinant for the memory consolidation and retrieval. The use of inadequate alert stimuli can interfere with the cognitive testing results when studing elderly individuals. A cultural bias can be avoided if a normatization of neuropsychological tests, batteries, and similar cognitive accessing tools are employed. The same can occur between inter-ageing samples. The normatizations of the IAPS for brazilian young and elderly populations, here well demonstrated, can fulfill these purposes properly.

KEY WORDS: International Affective Picture System (IAPS), Self Assessment Manikin (SAM), emotion, attention, geriatrics and gerontology.

*Normatização de 702 imagens do International Affective Picture System (IAPS) para testes de atenção e emoção em geriatria e gerontologia no Brasil (Resumo). Tese de Doutorado, Universidade Federal de São Paulo - Escola Paulista de Medicina (Área: Psicobiologia). Orientador: Orlando Francisco Amodeo Bueno. Co-orientador: Paulo Henrique Ferreira Bertolucci.

Address: Alameda Campinas 105 / 104, 01404-000 São Paulo SP, Brasil. E-mail: weylergalvaoporto@ahoo.com