

C240267 : MAJOR EDUCATIONAL STATISTIC

KEY WORD: HODGES-LEHMANN ALIGNMENT/ MEDIAN/TRIMMED MEAN/ WINSORIZED MEAN

PATCHARA CHOOMSAI NA AYUDHAYA : A COMPARISION OF THE EFFECTS OF
HODGES-LEHMANN ALIGNMENT STATISTICAL TESTS WITH MEDIAN, TRIMMED
MEAN AND WINSORIZED MEAN ON THE TYPE I ERROR. THESIS ADVISOR :
ASST. PROF. DEREK SRISUKHO, Ph.D. 97 pp. ISBN 974-584-101-3

The purposes of this study was to compare the actual Type I Error of Hodges-Lehmann Alignment Statistical Tests when aligned on median, trimmed mean, and Winsorized mean. The samples were drawn from normal distributed populations. The comparisons were made for the samples size of 30,60and90. The Monte Carlo simulation technique was employed for the study.

The findings were as follows ;

1. When aligned on median, trimmed mean, and Winsorized mean, the Hodges-Lehmann Alignment Statistical Tests could equally control Type I Error as it was nominated at the level of .05 at all sizes of samples.

2. When nominated at the level of .01 the findings were as follows :

- 2.1 When aligned on median, trimmed mean, and Winsorized mean, the Hodges-Lehmann Alignment Statistical Tests could equally control Type I Error at samples size of 60 and 90

- 2.2 When aligned on trimmed mean, the Hodges-Lehmann Alignment Statistical tests could control Type I Error better than aligned on Winsorized mean and median at samples size of 30.