



### **KEY WORDS**

- ✓ I<sup>2</sup> heterogeneity measure
- ✓ Tau² heterogeneity measure
- ✓ Rb heterogeneity measure
- ✓ H heterogeneity measure
- ✓ Meta analysis

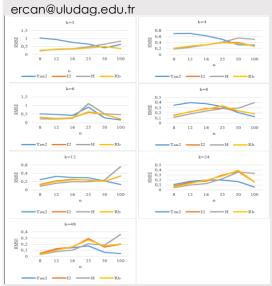
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# COMPARISON OF HETEROGENEITY MEASURES IN META ANALYSIS

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### THESIS ABSTRACT

The studies simulated as homogeneous and heterogeneous for meta-analysis in the dissertation study. Disease-event probabilities P=0.5; 0.6; 0.7; 0.8 and 0.9, hypothetical populations consisting of 1,000,000 units were created and samples were taken 1,000 times. Meta-analysis was conducted with samples taken according to different sample sizes and different number of studies. The performances of  $\tau^2$ ,  $I^2$ ,  $R_b$ , H heterogeneity measures were compared.

### APPLICATION AREAS OF THE THESIS RESULTS

Meta-analyses are in the central to synthesizing the findings needed to inform the clinical decision process. Heterogeneity needs to be examined in meta-analysis studies. Since there are different opinions in the literature, the simulation results obtained in our dissertation study can be used to examine heterogeneity measures in meta-analysis studies.

### **ACADEMIC ACTIVITIES**

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- E Yilmaz, Ö Toluk (2022). Comparison of clinical findings and electromyography results in patients with preliminary diagnosis of carpal tunnel syndrome. *Journal of Electromyography and Kinesiology*
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