

ABSTRACT
CORRELATION BETWEEN PUPIL DISTANCE AND STEREOPSIS IN
RESIDENCY PROGRAM AIRLANGGA UNIVERSITY DR SOETOMO
GENERAL HOSPITAL SURABAYA
(Cross Sectional Observational Analytic Study)
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Objective: To analyze the correlation between pupil distance and stereopsis in residency program Airlangga University Dr Sutomo Hospital, Surabaya.

Methods: This study was a cross sectional observational analytic study. 101 subjects enrolled were first year residency program in Airlangga University aged 25-40 years old, examined in ophthalmology outpatient clinic Dr Soetomo Hospital Surabaya. The pupil distant was measured with Victorin methode using a ruler and penlight. The pupil distant was divided into three groups : <60 mm, 60-64 mm, and >64 mm. The stereoacuity was measured by TNO sereoacuity test.

Results: Spearman correlation analysis indicated positive correlation between pupil distant and stereopsis with $r_s=0,623$, $p=0,000$ ($p<0,05$). From three groups of pupil distant intervals, all groups were not normally distributed ($p = .000$). Kruskal Wallis test showed significant difference in stereoacuity values between the three groups ($p = .000$) and from Mann-Whitney test the significant difference was found between < 60 mm group and 60-64 mm ($p = .000$), < 60 mm group and >64 mm group ($p = .000$), and between 60-64 mm group and >64 mm ($p = .000$).

Conclusions: There was a correlation between pupil distant and stereopsis. The smaller the pupil distance, the smaller value of stereoacuity, therefore the better the stereopsis.

Keywords : pupil distant, stereoacuity, stereopsis, Victorin methode, TNO stereotest