

Title	Monocular Clues in Seven Stereoacuity Tests
Author-s	Hahn, E., Comstock, D., Connick, S., MacCarron, J., Mulla, S., Peters, P., & LaRoche, R
Contact info	Phone: 01- 4355010 - Ext: 107 smulla@ksu.edu.sa
Department	King Saud University , College of Applied Medical Science , Optometry Department
Major	Optometry / Orthoptic
Citation	Dalhousie Medical Journal, Spring 2010, 37 (1), 4-13.
Year of publication	2010
Publisher	Dalhousie Medical Journal
Sponsor	Eye Care Team, IWK Health Centre
Type of publication	Article in Scientific Periodical Specialized Journal
ISSN	1488-9994
URI/DOI	http://edmj.medicine.dal.ca/archives/Spring_2010.pdf
Full Text (yes, no)	YES
Key words	Stereoacuity ,Stereoacuity test, Monocular clues, Strabismus,
Abstract	<p>Purpose: There have been numerous reports with evidence detailing the presence of non-stereoscopic, or “monocular”, clues in commonly used stereoacuity tests. The purpose of this study was to quantify the influence of monocular clues in the Titmus, Randot ®, Randot ® Special Edition, Randot ® Preschool, Lang, Lang II, and Frisby stereoacuity tests. Stereoacuity testing is typically performed/ or interpreted by eye care professionals and other health / occupational professionals.</p> <p>Methods: Two separate prospective studies were conducted. The first assessed the monocular responses of 100 subjects, age 8-67, with normal stereoacuity, and no previous exposure to any of the seven tests administered. The second assessed the monocular responses of 33 subjects, age 8 to 65 with longstanding, manifest horizontal strabismus of 20 prism diopters or greater, on the aforementioned stereo tests. Results: Monocular clues were found to be present for the normal group on the Titmus (61%), Randot ® (6%), Randot ® Special Edition (5%), Randot ® Preschool (7%), Lang (13%), and Lang II (37%). Monocular clues were found to be present for the strabismic group on the Titmus (100%), Randot ® (9%), Randot ® Special Edition (9%), Randot ® Preschool (12%), Lang (3%), and Lang II (27%). There was no monocular identification, for either group, on the Frisby stereo test, but there was minimal binocular identification by a subject with manifest strabismus. Conclusion: Monocular clues were present for both the normal and strabismic group on 6 of the 7 stereo tests investigated. Based on these findings the authors conclude that caution must be used when interpreting patient responses on 6 of the 7 aforementioned stereo tests.</p>