UNIVERSITI TEKNOLOGI MARA

ACCOMMODATION AND VERGENCE FACILITY OF DIFFERENT LEVEL VISUAL COMPLAINTS BASED ON REFRACTIVE ERROR GROUPS

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AUTHOR’S DECLARATION

I declare that the work in this study is considerably my own, and to the extent that any part of this work is not my own, I have indicated that it is not mine by a fully acknowledgement in accordance with the standard referring practices of the discipline.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, University Teknologi Mara (UiTM) regulating the conduct of my study and research.

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ABSTRACT

ACCOMMODATION AND VERGENCE FACILITY OF DIFFERENT LEVEL VISUAL COMPLAINTS BASED ON REFRACTIVE ERROR GROUPS

Purpose: To compare the monocular accommodation facility (MAF), binocular accommodation facility (BAF) and vergence facility (VF) among low and moderate visual complaint condition between myopic and emmetropic subject. Methods: Fifty-two subjects (19-35 years old) with 6/6 vision at distance, N5 for near visual acuity, and no history ocular disease participated in the study. Subjects need to answer the survey “Visual Discomfort” by Conlon et al to determine the level of visual complaint. Subjects were classified based on refractive error group before proceeding to next assessment. The monocular accommodation facility (MAF), binocular accommodation facility (BAF) and vergence facility was measured and recorded in cycle per minute (cpm). Results: The result in Kruskall-Wallis test showed no significance difference on MAF \( (p = 0.382) \), BAF \( (p = 0.357) \) and vergence facility \( (p = 0.689) \) in different level of visual complaint and MAF \( (p = 0.408) \), BAF \( (p = 0.221) \) and Vergence facility \( (p = 0.412) \) between myopes and emmetropes. Conclusion: Thus, subject with different level of visual complaint and refractive error groups had no statistically different on accommodation facility and vergence facility as proposed by the result of current study.

Keywords: Accommodation facility, Vergence facility, Visual complaints.
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