

UNIVERSITI TEKNOLOGI MARA

**SYMPTOMS RELATED TO COMPUTER
VISION SYNDROME AND THE
CHANGES OF VERGENCE
COMPONENTS AFTER VDU WORK**

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AUTHOR'S DECLARATION

I declare that the work in this thesis and the study to which it refers are the product of my own except for the quotations which have been fully acknowledged in accordance with the standard referring practices of discipline.

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ABSTRACT

SYMPTOMS RELATED TO COMPUTER VISION SYNDROME AND THE CHANGES OF VERGENCE COMPONENTS AFTER VDU WORK

Introduction: Nowadays, the prevalence of computer vision syndrome among computer user is increasing. The objectives of this study were to determine the symptoms related to computer vision syndrome and to assess the changes of vergence components after the visual display unit usage among UiTM staff. Previous study done only assessed on the changes after VDU work of one vergence components only. Thus, this study conducted by measured the changes of all vergence components after VDU work. **Material and methods:** The assessments on vergence components were performed twice first in the first morning and second at the end of the workday and a questionnaire adopted from a study by Reddy et al during the second assessments. **Results:** Results showed most of the subjects having tiredness of eyes after prolong computer used and the least reported symptom was eye redness. The components of vergence that had significant changes were NPC and PFV while others did not have any changes. **Conclusion:** In conclusion, the most reported symptoms of CVS among UITM staff was tiredness of eye usually occurred after average of 5 hours computer usage daily. The most reported symptoms followed by neck pain and shoulder pain. Both symptoms were non-ocular symptoms which related in improper posture in ergonomic work setting. It indicated that UITM staff probably did not work under correct ergonomic settings. There were significant changes of vergence components from pre-task and post-task which were NPC and PFV break point. However, the others vergence components had no significant changes in both parameters. The association between symptoms reported with NPC and PFV was not evaluated as there was no test of association was performed and limitation in the present questionnaire.

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