Computer-related eye pain: a case study from Malaysian public (UPM) for the effect of lighting on eye strain among university students

ABSTRACT

This paper aims to evaluate the effect of lighting of presentation screen and the workplace on eye and student's performance. Random sampling technique was used as a method for collecting data from students. Data were carefully analysed, and the results from this study illustrate the students 'satisfaction about the lighting in the classrooms. Moreover, the results established a relationship between the eye pain symptoms and lighting in the classroom, as it showed an increasing in a number of students complaining from an eye-pain related problem. The study proved that position of the windows, light resource position and the occurrence of the shadowing on the work surface have led to eye-pain symptoms. On the other hand, the study showed that postgraduate students eyes are strongly affected due to the problem of lighting in the workplace than the undergraduate students. Therefore, special attentions should be given to the older students comparing to young students. Moreover, extra attention should be given to the natural and artificial lighting sources design and periodic maintenance to achieve good student satisfactions about the classroom's environment while using projection screen. It is advisable that students be offered training courses to increase their awareness about the concept of lighting and computer ergonomic in order to reduce computer-related health problems.