

ABSTRACT NO.: 534

TITLE: **Are Tertiary-level users of Mobile Computers Applying Sound Ergonomic Principles during Usage of These Devices?**

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In this study, a survey of 100 undergraduate students at the University of the West Indies was conducted to assess whether they were aware and applying ergonomic principles while using their mobile computer. With this, the musculoskeletal disorders were interpreted based on the different postures that were assumed by the students that were noted in majority in the survey. The results include descriptive statistics regarding the levels of the discomforts that were noted by the students. It was noted that generally, 75% of the students that were assessed were not aware of the meaning of ergonomics and were not applying ergonomic principles hence the need to create awareness with this study. There was a range of postures that added to the level of discomfort due either to the design of the desks, chair and even the laptop not to mention continuous use which was not the intended use of the laptop.

The major levels of discomfort were noted in the back which was a result from applying improper ergonomics. Sample pictures were taken and the position with the spine being placed in an uncomfortable position was noted as the general position assumed by the students. A general biomechanical analysis was done on a test subject based on one of the pictures and it was noted that extreme loading stress was applied in the lower back causing the most discomfort. In a similar research conducted by Moras (2000) it was noted that students of St Mary's University were also not applying ergonomic principles and experienced discomfort. Here we can note a trend as the University Students are unaware about ergonomics principles and are not applying them as they use their mobile computer.