

Improving knowledge of text neck and neck pain using interactive smartphone application for undergraduate students in Universiti Sains Malaysia

ABSTRACT

Text neck syndrome has become more prevalent in modern life and can be avoided with proper neck warm-up exercise and frequent smartphone break-away. However, research has shown that due to a lack of education and awareness, most mobile users did not have the habit of break-away when using smartphones. Most solutions required the use of an external device attached to the body, resulting in significantly reduced ease of use and comfort. The objective of this study is to determine the level of knowledge and awareness of the text neck among undergraduate students of Universiti Sains Malaysia (USM) and to create an interactive mobile application to reduce the prevalence. The app is AR-based neck exercise gamification that alerts incorrect posture using a smartphone front camera and a built-in sensor. The proposed study will enable people who are suffering from, or at risk of, text neck to have more pleasant and engaging neck exercise experience with a better exercise impact, and may promote regular break-away from the wrong posture.