

Text Neck Epidemic: a Growing Problem for Smart Phone Users in Thailand

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Abstract - This research study examined the rapid changes in computer user behavior among Thai internet users, and analyzed differences in the computer health risk between desktop users and mobile device users. The emphasis is on “Text Neck” which has become a global epidemic affecting millions of people of all ages using various computer devices. The purpose of this study was to consider the incidence and relationship between health problems, and Thai Internet users’ behavior on computer and smart devices. The main research instrument was an internet-based survey which yielded 642 responses. The research findings reflected that the text neck health problem in Thailand is growing. This survey found that the smart phone device was the most popular computer application rather than desktop computers as almost two thirds of Thais always have their smart phones with them. The research isolated other behaviors of Thai computer users that contribute to health problems as the survey found that almost two thirds of respondents never wear glasses to protect their eyes from the blue light that emanates from computer screens (64.33%). Almost one third of participants continuously worked on the computer without a break (30.84%). On occasions, 62.3 percent of users experienced pain in the neck and/or shoulder regions when working on the computer.

Keywords - Computer Users Behavior, Computer Vision Syndrome, Health, Survey, Text Neck

I. INTRODUCTION

People’s contemporary lifestyle has become much dominated by computer technology; often overuse in digital tasks on handheld mobile technology induces ‘Text Neck’ [1, 2], seemingly a world-wide health effect. The term of ‘text neck’, or another phrase ‘turtle neck posture’, can be described as a repeated stress injury and pain sustained from excessive watching or texting on handheld devices for long periods of time [1, 3-5]. Text neck may cause many harmful symptoms such as neck pain, shoulder pain, upper back pain, chronic headaches and increased curvature of the spine [1-6]. Mobile device users frequently adopt prolonged forward head posture while looking down at the screens of mobile devices [1-6]. Text neck directly affects the spine while flexing the head forward at varying degrees - when the head tilts forward at 15 degrees, the forces on the neck surge to 27 pounds, at 30 degrees 40 pounds, at 45 degrees 49 pounds and at 60 degrees 60 pounds, then at 90 degrees the model prediction was not reliable [5]. This issue is a major concern with children, since their heads are larger in relation to their body size than adults, and thus they are have an increased risk for text neck given their propensity to use mobile phones. Serious permanent damage of untreated text neck can be the result and be quite similar to occupational overuse syndrome or repeated stress/strain injuries [2].

II. LITERATURE REVIEW

Both text neck and Computer Vision Syndrome (CVS) are parts of serious physical computer-related illnesses [2]. According to