Wrist Pain, Technological Device Used, and Perceived Academic Performance Among the College of Computer Studies Students

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Abstract: Introduction: This study investigated the impact of prolonged device usage on wrist pain and perceived academic performance among college students in Computer Studies. The research aims to explore the correlation between the frequency of technological device use and the incidence of wrist pain, as well as how this pain affects students' academic performance. The study seeks to provide insights that could inform interventions to promote better musculoskeletal health among students engaged in intensive technology use to further improve their academic performance. Method: The study utilized descriptivecorrelational and comparative design, focusing on bona fide students from Silliman University's College of Computer Studies during the second semester of 2023-2024. Participants were recruited through a survey sent via school email, with responses collected until March 30, 2024. Data was gathered using a password-protected device and Google Forms, ensuring restricted access to raw data. The demographic profile was summarized, and the prevalence of wrist pain and device usage were analyzed using percentages and weighted means. Statistical analyses included Spearman's rank correlation coefficient to assess the relationship between wrist pain and device usage and an Independent T-test to evaluate differences in academic performance based on wrist pain presence. Alpha was set at 0.05. Results: The study revealed that 40% of College of Computer Studies students experience wrist pain, with 2 out of every 5 students affected. Laptops and desktops were the most frequently used devices for academic work, achieving a weighted mean of 4.511, while mobile phones and tablets received lower means of 4.183 and 1.911, respectively. The average academic performance score among students was 29.7, classified as 'Good Performance.' Notably, there was no significant relationship between the frequency of device usage and wrist pain, as indicated by p-values exceeding 0.05. However, a significant difference in perceived academic performance was observed, with students without wrist pain scoring an average of 30.39 compared to 28.72 for those with wrist pain and a p-value of 0.0134 confirming this distinction. Conclusion: The study revealed that about 40% of students in the College of Computer Studies experience wrist pain, but there is no significant link between device usage and pain occurrence. However, students without wrist pain demonstrated better academic performance than those with pain, suggesting that wrist health may impact academic success. These findings imply that physical therapy practices in the Philippines should focus on preventive strategies and ergonomic education to improve student health and performance.

Keywords: wrist pain, frequency of use of technological devices, perceived academic performance, physical therapy

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