

## INNOVATIVE ERGONOMIC ARMCHAIR ATTACHMENT: ENHANCING POSTURE CORRECTION

**Russel Vincent Ducanes**University of Perpetual Help – Dr. Jose G. Tamayo Medical University  
**PHILIPPINES****Ralph Clement P. Naval**University of Perpetual Help – Dr. Jose G. Tamayo Medical University  
**PHILIPPINES****Justin Dave H. Pineda**University of Perpetual Help – Dr. Jose G. Tamayo Medical University  
**PHILIPPINES**

### ABSTRACT

Poor posture among college students has become an increasing health concern due to prolonged sitting and the widespread use of standard classroom furniture that does not adequately support proper body alignment. Extended periods of sitting in ergonomically unsuitable chairs may contribute to musculoskeletal discomfort, spinal misalignment, reduced mobility, and decreased academic performance. This study aimed to develop and evaluate the acceptability of an innovative ergonomic armchair attachment designed to enhance posture correction among college students. The study employed a descriptive-developmental research design involving licensed physical therapists with at least three years of professional experience and Physical Therapy students from the University of Perpetual Help – Dr. Jose G. Tamayo Medical University. Participants evaluated the prototype using a modified Cornell Ergonomic Seating Evaluation Questionnaire focusing on ease of use, chair adjustment, seat comfort, design and appearance, and overall acceptability. Data were analyzed using frequency, percentage, and weighted mean. Results revealed that the ergonomic armchair attachment achieved a high level of acceptability, particularly in seat comfort and ease of use, while chair adjustment received a moderately acceptable rating, indicating areas for further improvement. The findings suggest that the ergonomic armchair attachment provides practical support for posture correction and may help reduce discomfort associated with prolonged sitting. The study highlights the importance of incorporating ergonomic principles and anthropometric considerations into classroom furniture design to promote healthier sitting posture and improve students' overall comfort and well-being.

**Keywords:** Ergonomic armchair attachment, posture correction, ergonomics, college students, musculoskeletal health