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## Ergonomics in Esports: A Video Training Series for Esports Athletes

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# Ergonomics in Esports: A Video Training Series for Esports Athletes

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## BACKGROUND

Electronic sports, also known as *esports*, refers to organized and competitive playing of video gaming against other players or teams. There are approximately 532 million people globally that participate in esports and about 3,198 million of those are professional esports athletes (World Football Summit, 2022).

Unlike traditional sports, esports is sedentary, with athletes spending several hours daily seated at their gaming stations. Additionally, esports athletes lack the knowledge of ergonomic hazards and how to mitigate repetitive musculoskeletal injuries and mental health challenges (DeFrancisco-Donoghue et al., 2019).

It is estimated that 40% of esports athletes experience occupational overuse syndromes (OOS), however there is a lack of resources to educate esports athletes on ergonomic hazards and mental health challenges, highlighting a critical need for comprehensive education (Singleton, 2022).

## PROBLEM

**Esports athletes are unaware of the ergonomic hazards of participation in esports that lead to OOS and poor mental health that can adversely impact participation, occupational performance, and quality of life.**

## PURPOSE

**To create a video training series to educate esports athletes on the ergonomic hazards of esports.**

## METHODS

### Development Phase

- Informed by the Health Belief Model
- Reviewed and synthesized literature on ergonomics of esports
- Prepared scripts for seven video themes
- Obtained materials for video production
- Received feedback from peers, mentors, and faculty
- Revised scripts from feedback received

### Production Phase

- Recorded videos

### Revision Phase

- Received feedback from peers, mentors, and faculty
- Revised videos

### Publication Phase

- Published on YouTube channel
- Poster presentation



<https://www.youtube.com/@EsportsErgoNexus/playlists>

## VIDEO TRAINING SERIES CONTENT

### 1. The Need for Physical Activity in Esports Athletes

**Learning Objective:** Describe the health benefits of physical activity for esports athletes

- Understanding sedentary behavior in gamers
- Consequences of prolonged sitting: physical and mental affects
- Switching from sedentary to active lifestyle

### 2. Preventing Occupational Overuse Syndrome in Esports

**Learning Objective:** Implement strategies to prevent OOS in esports athletes

- OOS in esports
- Identifying symptoms of OOS
- Occupational therapy prevent and management strategies for OOS

### 3. Mastering Positioning for Optimal Gaming Performance

**Learning Objective:** Define the concepts of body positioning and significance in esports

- Identifying common posture mistakes
- Proper body positioning
- Equipment placement and positioning
- Developing healthy habits

### 4. Maintaining Mental Health in Esports

**Learning Objective:** Implement mental health support and coping strategies for esports athletes

- Identifying mental fatigue
- Stress management and coping strategies
- Occupational therapy strategies for a healthy psychological well-being

### 5. Weekly Wellness Routines for Gamers

**Learning Objective:** Identify the components of a weekly wellness routine for esports athletes

- Scheduling physical and mental fitness
- How to set boundaries in gaming
- Self-reflection

### 6. Maintaining Eye Health in Esports

**Learning Objective:** Describe strategies for maintaining eye health in esports

- Identifying symptoms of eyestrain
- 20-20-20 rule
- Eye exercises and routines

### 7. Health Professional Resources for Esports Athletes

**Learning Objective:** Describe the types of healthcare professionals and resources available to esports athletes

- The role of healthcare professionals
- Healthcare resources

#### Playlist



#### References



**This project did not involve human subjects of research and did not require IRB approval.**