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**The Impact of Barre Stretching on Self-Reported Stress and Pain Levels Among First-year  
Dental Hygiene Students**

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## **Study Protocol**

The Barre stretching video sessions were available online, and students were instructed to complete each session in a quiet, comfortable setting. The trial aimed to create a relaxed session environment that minimally disrupted the student's learning environment without affecting the study's outcome. The Barre stretching intervention consisted of a 15-minute recorded video session with static and isometric movements focused on the hands, wrists, shoulders, and neck, combined with breathing exercises throughout each movement. A 15-minute Barre stretching video was selected to ensure each stretching movement could be held for 30-45 seconds, increasing blood flow and circulation, improving heart rate variability (HRV), enhancing muscle suppleness, and reducing stress levels through regulated breathing. Participants performed fifteen targeted stretching movements: five for the hands/wrists, five for the shoulders, and five for the neck region.

## **Statistical Analysis Plan**

The data analysis was conducted using the Jamovi software program to perform descriptive statistics and paired sample t-tests for the Perceived Stress Scale (PSS) and the Numerical Rating Pain Scale (NRPS). The level of significance was established at  $p=0.05$ , allowing evaluation of the effectiveness of the Barre stretching intervention in reducing self-reported stress and pain levels among first-year dental hygiene students.