

postures, and mechanical parameters of the 6 athletes before and after the addition of the wind tunnel simulation training to evaluate the effect of wind tunnel training. **RESULTS:** After TP-2 training in 6 athletes the average time pushing off and the YBT-LQ lateral and medial difference between right and left leg extension, which was a significant difference ( $p < 0.05$ ), and the total FMS score has a significant difference ( $p < 0.01$ ). The average distance pushing off was significantly shortened (AT-1:4.13±0.40; AT-2:3.09±0.67;  $p < 0.01$ ), the athletes' mean combined speed and mean angle of the horizontal plane were significantly reduced (AT-1:9.32±0.87; AT-2:5.58±1.30;  $p < 0.01$ ), and the mean combined speed of the introduction was significantly increased (AT-1:19.95±0.48; AT-2:24.29±0.73;  $p < 0.01$ ), the athletes' average jumping distance was increased by 3.80 m.

**CONCLUSIONS:** Wind tunnel simulation training can optimize the energy distribution of muscles during exercise and improve the physiological adaptability of athletes' muscle tissues in high-speed exercise.

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### Training Parameters That Influence Heart Rate Recovery In Collegiate Field Hockey Players

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Collegiate field hockey involves vigorous aerobic and anaerobic stress throughout a 132-day season. To maintain optimal performance, appropriate training loads and recovery durations are necessary.

**PURPOSE:** To examine the effect of different training variables on the duration of cardiovascular recovery in field hockey players.

**METHODS:** We tracked 19 D1 field hockey players during their competitive season using Polar Team Pro monitors. The tracking period lasted 88 days and included 51 practices. Competitions were not evaluated owing to inconsistent play patterns and the possibility of psychological stress confounding physiological parameters. Data were collected on average heart rate (HR<sub>avg</sub>), maximum heart rate (HR<sub>max</sub>), number of sprints performed, average and maximum running speeds, total distance in meters, distances covered in 5 speed zones, total energy expenditure, training load score, and duration of heart rate recovery. Linear regression tested the effect of all performance variables on duration of heart rate recovery.

**RESULTS:** During each practice, HR<sub>avg</sub> was 138.3 ± 15.0 bpm, HR<sub>max</sub> was 189.4 ± 13.8 bpm, players performed 48.6 ± 21.9 sprints, had an average speed of 2.9 ± 0.7 km/h, reached a maximum speed of 23.7 ± 4.1 km/h, and covered 3,870.6 ± 1,579.2 meters. Estimated energy expenditure was 645.0 ± 259.6 kcals, training load score was 117.5 ± 63.5, and duration of heart rate recovery was 27.5 ± 36.9 hours. Recovery time was positively correlated with all performance variables ( $p < 0.001$ ). When all predictors were simultaneously included in a linear regression, the average variance inflation factor was 34.6. The strongest variable was training load. With all predictors included, the model was significant ( $R^2 = 0.654$ ;  $p < 0.001$ ) and each additional point of training load predicted 0.7 additional hours of recovery duration ( $p < 0.001$ ; 95% CI of  $\beta$ : 0.581, 0.768). In a simple linear regression, the model retained significance ( $R^2 = 0.597$ ;  $p < 0.001$ ) and each additional point of training load predicted 0.4 additional hours of recovery duration ( $p < 0.001$ ; 95% CI of  $\beta$ : 0.422, 0.470).

**CONCLUSION:** Coaching and training staff may consider adjusting the frequency and intensity of practice sessions according to training loads to avoid undue cardiovascular stress and maintain peak performance throughout the season.

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### Usability And Acceptability Of The Strong Foundations Fall And Fracture Prevention Program In Older Adults

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Fall-risk reduction programs targeting improvements in muscular strength, postural control, and static and dynamic balance have consistently been shown to reduce fall risk. As such, the Centers for Disease Control and Prevention (CDC) has outlined an evidenced-based *clinical* approach to identify those at risk for falls and to refer community-based fall-prevention programs. Our unique fall prevention program, **Strong Foundations**, is designed to be delivered digitally with the expectation that this will reduce barriers associated with exercise in older adults. While other programs exist both in the digital format and in-person, the novel feature of this program is the delivery of semi-individualized instruction in real time within a group setting.

**PURPOSE:** To explore the usability and acceptability of the **Strong Foundations** program in older adults.

**METHODS:** 76 adults over the age of 65 were recruited. After completing the 12 week **Strong Foundations** digital exercise intervention, participants completed the System Usability Scale (SUS), a commonly used measurement tool to assess the usability of a digital technology or novel platforms, as well as several questionnaires about their subjective experience with the digital format.

**RESULTS:** Participants were 90% female with a mean (SD) age at baseline of 72(6) years. 6 (8%) dropped prior to the completion of the program, with the remaining 92% showing a mean (SD) attendance rate of 9.6 (2.9) classes. Completing participants reported a SUS score of 80.8 (14.6) with only 12 (17%) following below the minimal acceptable threshold of 70. Overall satisfaction was 8.7 (1.4) out of 10 with 61 (87%) scoring 8 or higher.

	Mean	Standard Deviation	n (5%) responded 5
I felt that I could hear the instructor	4.44	0.673	37 (52.9)
I felt that I could see the instructor	4.04	0.924	23 (32.9)
I felt the instructions were clear	4.43	0.734	37 (52.9)
I felt safe doing the exercises	4.59	0.551	43 (61.4)