Detailed Table 1: Demographic, lifestyle and cognitive health data collected

Demographic characteristics	Survey responses	Neuromechanical performance test metrics
Sex	Concussion Symptoms (SFI_Cx) Symptoms from Concussion or Repeated Head Impacts (6-level survey response)	Average Reaction Time using FitLight (FL_Tav) Unilateral Reactive Hop Test Average Reaction Time for Right and Left Extremities
Age	Sports Fitness Index 0-100 score Ratings of persisting effects from previous injuries (SFI_totalscore)	Average. Reaction Time for Right limb using Fitlight (FL_RT) Unilateral Reactive Hop Test Average Reaction Time for Right Extremity
Body Mass Index (BMI)	Pittsburg Sleep Quality Index (PSQI_Global) High Score = Poor Sleep Quality	Correct No. of Responses for Right limb using FitLight (FL_RTC) (Correct out of 6 Trials)
Mass Moment of Inertia (MMOI)	Stress level on DASS scale (DASS_StressCat) High Score = High Stress	Average. Reaction Time for Left limb using Fitlight (FL_LTav) Unilateral Reactive Hop Test Average Reaction Time for Left Extremity
Self-Reported Dominant Limb	Anxiety level on DASS scale (DASS_AnxietyCat) High Score = High Anxiety	Correct No. of Responses for Left limb using FitLight (FL_Lcorr) (Correct out of 6 Trials)
High school sport participation (hssport_participation) Former High School Athlete	Depression level on DASS scale (DASS_DepCat) High Score = High Depression	Percent Correct Response using Fitlight (FitLpctCorrect) (Correct out of 12 Trials)
	Exercise_Level 8 Response options (Higher number = higher level of activity)	Average. Reaction Time for outer rings During Proactive Mode (DYNA_PA_RTexternalav) Dynavision Proactive Mode Average Reaction Time for Outermost 2 Rings
	Exercise_YN 8 Response options converted to binary categorization (0-3: Inactive; 4-7: Active)	Average. Reaction Time for inner rings during Proactive Mode (DYNA_PA_RTratioav) Dynavision Proactive Mode Average Reaction Time for Innermost 3 Rings
	Prior Injury (AnyInjury) Any sprain or strain within previous 12 months	Ratio of external hits to internal hits in Reactive Mode (DYNA_RAratio) Dynavision Dual-Task in Reactive Mode Ratio of Hits in Outermost 2 Rings to Hits in Innermost 3 Rings
	Core or Lower Extremity Injury (CoreLEinjury) Any core (abdomen or low back) or lower extremity sprain or strain within previous 12 months	Fitlight Efficiency Index (FL_EI) Unilateral Reactive Hop Test Average Reaction Time Divided by Average Response Accuracy (Right and Left Extremity Test Data Combined)
	Upper Extremity Injury (UEInjury) Any upper extremity sprain or strain within previous 12 months	Average Reaction Time (all rings) in proactive mode (pro_avgRT) Dynavision Proactive Mode Average Reaction Time
	Timeloss_anyinjury Any time-loss sprain or strain within previous 12 months	Total Hits in Reactive Mode (re_total_hit) Dynavision Dual-Task in Reactive Mode Ratio Total Number of Hits
	Timeloss_CoreLEInjury Any time-loss core (abdomen or low back) or lower extremity sprain or strain within previous 12 months	
	Timeloss_UEInjury Any time-loss upper extremity sprain or strain within previous 12 months	