

Assessing Parental Awareness & Knowledge of Overuse Injuries and Sport Specialization

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Purpose & Study Design

To assess parental knowledge of overuse injuries and sport specialization. The secondary aim was to determine whether educational materials could improve that knowledge. A quantitative cross-sectional survey to assess parental knowledge at a single point in time. Participants were recruited nationwide through email, social media, flyers, and ResearchMatch.

Background

Overuse injuries in youth sports are becoming increasingly common due to early sport specialization, year-round participation, and high training loads. While sports offer many benefits, these factors can lead to long-term injury, burnout, and even early dropout. Parents play a key role in guiding sport participation and injury prevention, making their knowledge especially important.

Methods

A cross-sectional, mixed-methods survey was administered via Qualtrics to parents of children ages 3–18 participating in organized sports. Participants were recruited nationwide through email, social media, flyers, and ResearchMatch, with inclusion limited to English-speaking parents of children in organized sports. The survey included demographics, child sport participation, parental investment and goals, and a validated 27-item Likert-scale instrument assessing parent motivations across multiple benefit domains. Baseline knowledge on prevalence, risk factors, specialization, and consequences was assessed, followed by an educational intervention (video and infographic) and post-intervention knowledge reassessment.

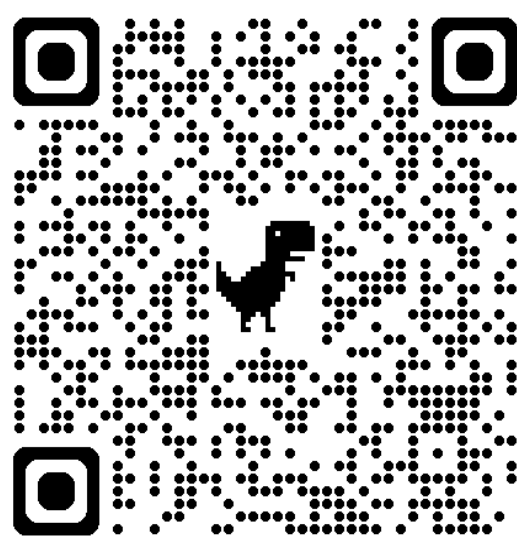
Data Analysis

Data were analyzed using SPSS 28.0. Descriptive statistics (frequencies, counts, and percentages) were calculated, with ordinal data reported as medians. Pre–post differences were assessed using non-parametric tests (Wilcoxon signed-rank for ordinal data; McNemar’s test for dichotomous data), with statistical significance set at $\alpha = 0.05$.

Participant Demographics

Among the 213 participants, 83% were female, 87% were white, 67% had a Bachelor’s degree or higher, and 72% live in urban areas.

References



OVERUSE INJURIES BRIEF OVERVIEW

What is it?

Sports-related microtraumas caused by repetitive body movements

Causes & Risk Factors

- overtraining
- repetitive motions
- early sport specialization
- lack of rest & recovery

Common Overuse Injuries

- stress fractures
- tendinitis
- growth plate injuries

Prevention

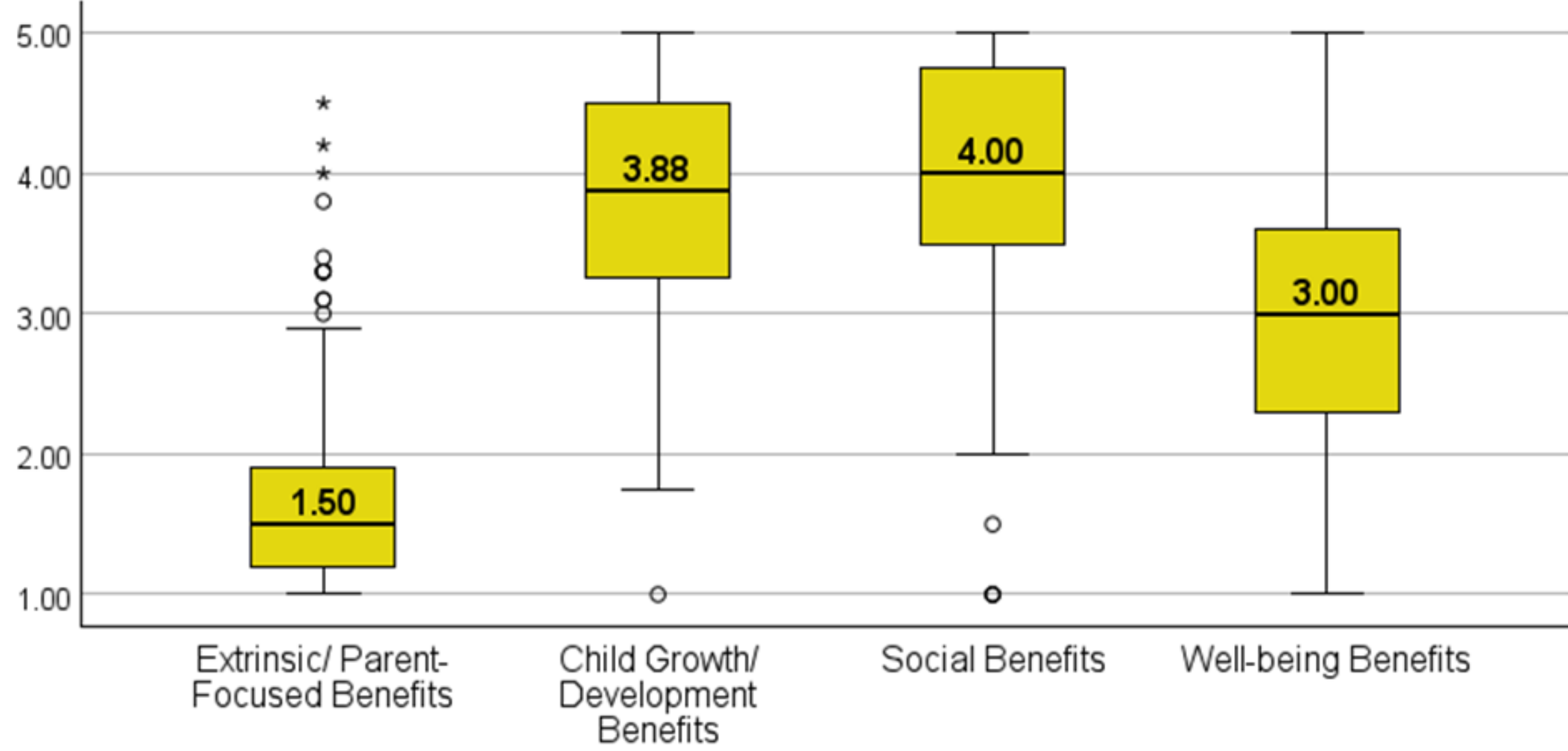
- encourage rest & recovery: 2 days a week
- multi-sport participation
- delay specialization until puberty
- proper warm-up
- < 8 months per year for one sport
- practice hours per week shouldn’t exceed age

Role of Parents

- recognize early warning signs
- support injury prevention
- listen to child’s pain signals

Results

Parent Attitudes Toward Sport Participation

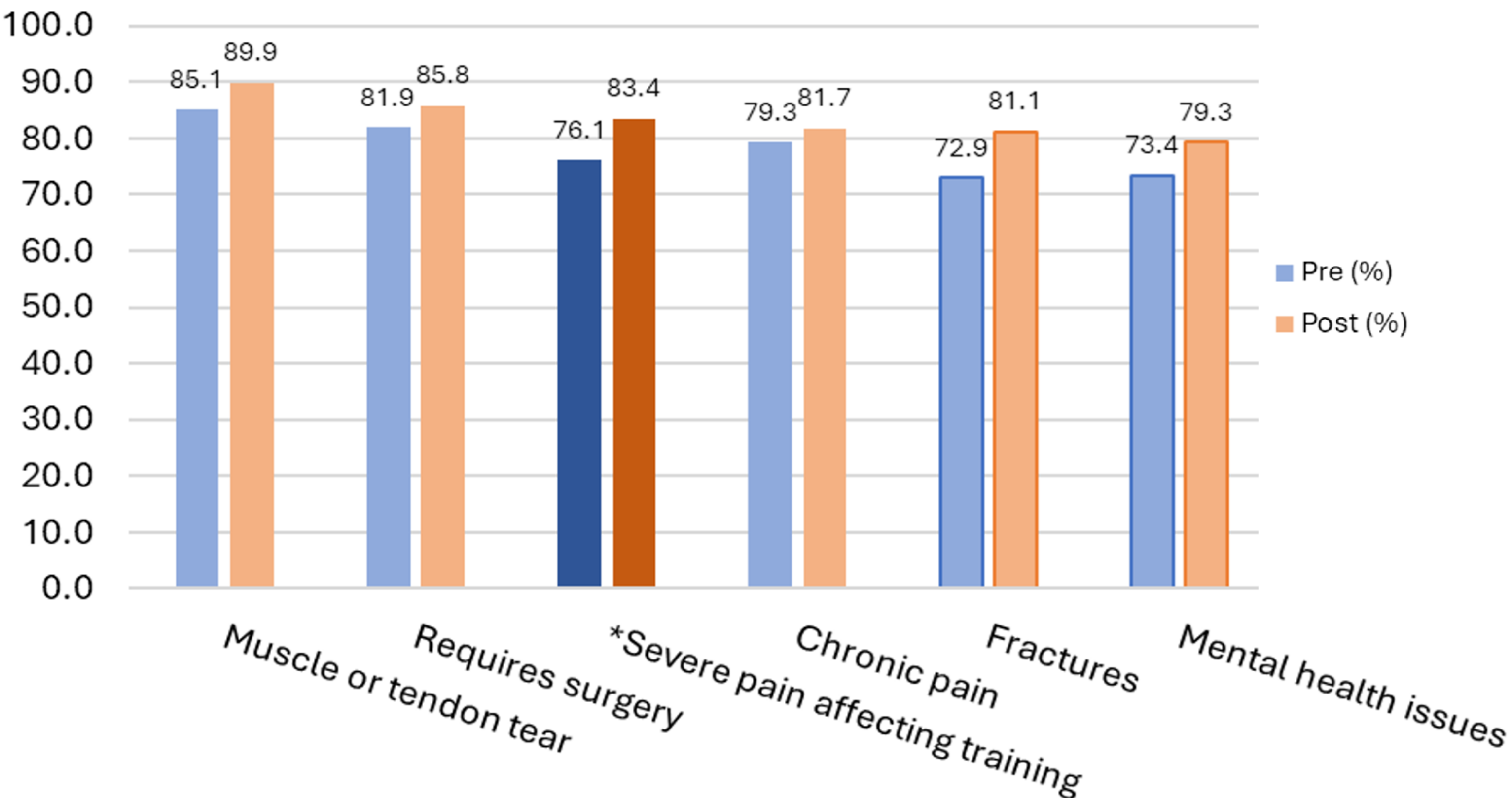


- High Injury Concern:** 75.1% report injury risk as a concern
- High Investment:** 77.5% report financial sacrifices for children’s sports participation
- High Expectation:** 62.5% hope for higher-level participation

Injury prevalence and parents’ perspective

- 61.1% of parents reported their child had at least one sports-related injury.
- Among injured athletes, 45.1% experienced recurrence of the same injury.
- 70% of the parents felt their children were unlikely to have overuse injuries

AFTER brief education using video and infographic, **+16%** agreement that overuse injuries are common



Conclusion

Parents perceive themselves as supporting a child-driven sport model, yet injury risk is often underestimated. Brief educational interventions can increase awareness of sport specialization and overuse injury risks and their impacts. These findings highlight the need to translate existing guidelines into user-friendly educational materials and improve dissemination to parents and coaches.

Limitations

- Limited generalizability (homogeneous sample: White, educated, urban)
- Self-report bias (recall + social desirability)
- Short-term pre/post design (no long-term retention)
- No causation due to study design
- “Select-all” survey format may affect accuracy
- No sport- or age-specific subgroup analysis

Clinical Relevance

Physical therapists are key in educating parents, who influence youth sport participation and injury risk. While brief education improves awareness, **continued education is needed across all stakeholders**—including PTs, parents, coaches, schools, club programs, and pediatricians. Clinicians should provide **clear, actionable guidance** (e.g., load management, limiting specialization) to help prevent overuse injuries.

Parent Reported Needs for Education and Awareness

- Signs and symptoms of overuse injuries
- Recommendations of training load, practice volume, and rest
- Sports-specific injury information and statistics
- Sports nutrition education
- Injury management (rest, ice vs heat, recovery, prevention strategies)
- Coach education and training on overuse injury
- Organizational policy/guideline changes
- shareable resources (Printable guides, handouts, packets, etc.)
- Technology or apps to monitor mechanics and workload
- Awareness campaigns (Social media, podcasts, etc.)
- Educational information provided at sport sign-up or program start
- Education from healthcare providers in office visits or well-child screening

