Imagery and action observation training as a mean to improve motivation towards resistance training in elite female ultimate frisbee players

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Purpose: A strong relationship was observed in ultimate frisbee players between training/playing time missed due to injury and time dedicated to resistance training.¹ Therefore, to contribute to a reduction of the prevalence and severity of injuries, it is important to increase as much as possible the athlete’s motivation towards resistance training. The purpose of this study was to analyze if imagery and action observation training is an effective way to increase athletes’ adherence to resistance training sessions in elite women’s ultimate frisbee.

Methods: 18 elite (1st Italian league) female ultimate frisbee players (age: 20.7 ± 3.2 years; height: 167.9 ± 6.1 cm; weight: 57.2 ± 3.9 kg) took part in the study. 14 elite male players (age: 22.2 ± 2.5 years; height: 183.1 ± 3.7 cm; weight: 72.2 ± 9.5 kg) were also recruited. The athletes had the possibility to perform a resistance training session thrice a week, with a requirement to participate in at least one resistance training session per week. Female players, after 14 weeks of traditional training, performed imagery and action observation training on exercises performed during the resistance training sessions for 5 weeks, in addition to traditional field and resistance training. Male players executed the same training program than females, without imagery and action observation training. The main outcome consisted of attendance of resistance training sessions by the players before and during the imagery training period.

Results: female players showed a significant (p<0.05) increase in attendance during the imagery training period compared with the traditional period (+4.3; +29.66%; ES= 1.47), while male players, who didn’t perform imagery and action observation training, showed no significant (p>0.05) change in mean attendance during the same part of the season (-1.10; -14.85%; ES= 0.55).

Conclusions: The results show that imagery and action observation training focused on resistance exercises, with a duration of 10-20 minutes, can be effective in increasing the attendance of weight training sessions by female ultimate frisbee players. This study highlights how imagery and action observation training can be useful in increasing the motivation of athletes towards resistance training.

Reference: