

The Physical Demands of Oztag using GPS Technology!

In this Issue:

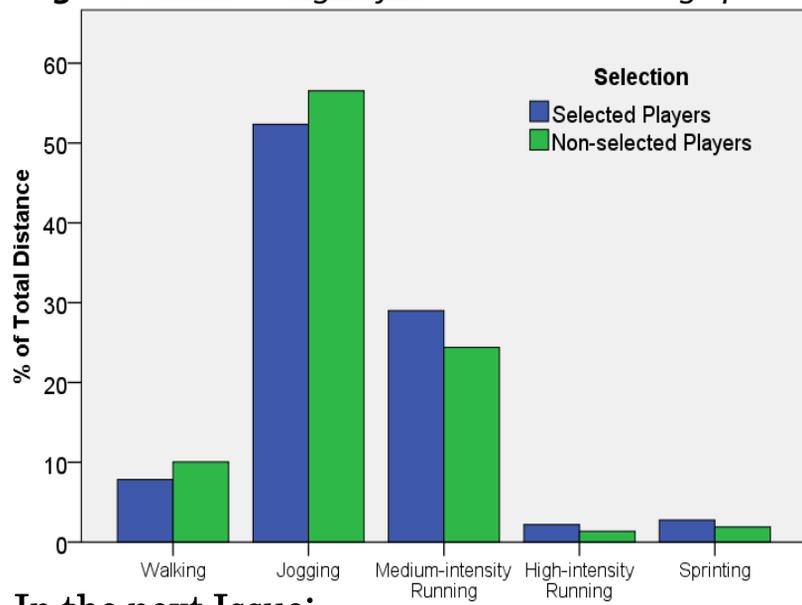
Earlier this year the *Sport Science Team* visited the 2013 Queensland State Cup to investigate the movement demands of oztag. Using GPS trackers provided by **Catapult Sports** the team tracked the movement patterns of player's providing information on how far and fast we run during an oztag game. This issue of *Sport Science Update* covers some of the GPS data and explains what it means and why it's important to you!

Table 1: Movement demands of Oztag State Cup

	Men's	Women's	NRL
Field Time (min:sec)	23:09	22:39	48:15 (Forwards) 68:45 (Backs)
Distance (m)	2238	2073	4565 (Forwards) 6615 (Backs)
Relative distance (m/min)	97	92	95 (Forwards) 97 (Backs)
Exercise: rest ratio (1: X)	6.5	7.0	6 (Forwards) 7 (Backs)
Max running speed (km/h)	26.6	22.0	24.5 (Forwards) 31.0 (Backs)

NRL data modified from Gabbett, T. J., Jenkins, D. G., & Abernethy, B. (2012). Physical demands of professional rugby league training and competition using microtechnology. *J Sci Med Sport*, 15(1), 80-86. and McLellan, C. P., Lovell, D. I., & Gass, G. C. (2011). Performance analysis of elite Rugby League match play using global positioning systems. *J Strength Cond Res*, 25(6), 1703-1710.

Figure 1: Percentage of distance at running speeds



In the next Issue:

How you can measure your aerobic fitness to make sure you're in shape for oztag!

Do you have a question for the sport science team?

Email: luke.hogarth@research.usc.edu.au

What does it all mean?

Table 1 displays some basic data on the physical demands of men's and women's state cup oztag. On average player's cover more than 2km a game most of which is spent jogging or at medium-intensity running. **Relative distance** is distance covered per minute of game-play and can describe average running intensity. **Exercise-to-rest ratio** describes average game intensity and is a measure of the time spent below and above high-intensity running speeds. Interestingly, men and women state cup oztag players played at game intensities similar to professional rugby league players in the NRL!

Why is it important to you!

When designing training programs to improve sporting performance it pays to train like you play! The GPS data tells us how we can do exactly that:

- Player's run around 2km per game at an average intensity of ~95 m/min.
- Players cover the majority of distance jogging but are required to perform frequent maximal accelerations and sprints over short distances.
- Players selected in the state side covered more distance at higher running speeds and less distance walking and jogging, so we need to be fit to stand out on the field!

In the coming issues we'll be going over the GPS data in more detail as we show you a few training techniques to improve your match fitness for Oztag!

**Do you have a Question?
Ask the Sport Science Team!**