

## **Comparing the effects of general warm up and specific warm up on agility performance of rugby players in University of Peradeniya, Sri Lanka**

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Agility is an important skill in Rugby league. The aim of the present study was to compare the effect of general warm up (GWU) and specific warm up (SWU) on agility performance in rugby players.

A convenient sample of twenty four healthy male rugby players from the University of Peradeniya participated in the study. The participants underwent (a) 15 minutes of GWU protocol and (b) 15 minutes of SWU protocol with a recovery interval of one hour. The (a) GWU protocol was: 4 minutes of light jogging, 11 minutes of dynamic stretching and the (b) SWU protocol was: 3 minutes of light jogging, 5 minutes of dynamic stretching, 7 minutes of unplanned agility drills (44s run drill, suicide drill, vertical jump, and step and swear drill). Agility of each player was measured using the Illinois Agility Test.

Results from the Wilcoxon signed rank test demonstrated that both GWU and SWU protocols improved the agility performance (GWU protocol=  $p < 0.001$ , SWU =  $p < 0.001$ ), but there was no significant difference between GWU and SWU protocols on agility performance ( $p = 0.954$ ). Paired t test results concluded that there was a significant effect on increasing difference of the heart rate of GWU and SWU protocol ( $p = 0.002$ ). The mean difference of heart rate of SWU ( $M = 55.12$ ) was higher than the mean difference of the heart rate of GWU ( $M = 47.12$ ). Therefore it was concluded that SWU improves heart rate more than GWU. The Spearman bivariate correlation test result found a positive correlation of height with pre agility score of GWU ( $r = 0.456$ ,  $n = 24$ ,  $p = 0.025$ ), post agility score of GWU ( $r = 0.445$ ,  $n = 24$ ,  $p = 0.029$ ), pre agility score of SWU ( $r = 0.445$ ,  $n = 24$ ,  $p = 0.029$ ) and post agility score of SWU ( $r = 0.478$ ,  $n = 24$ ,  $p = 0.018$ ).

This study found that there was no significant effect of GWU and SWU compared to one another but both GWU and SWU significantly affected agility performance. Furthermore agility of the rugby players has a significant positive correlation with the height of the players. As a result, it was concluded that shorter players have high agility compared with the taller players. Also it was found that weight of the rugby players has a strong positive correlation with their height.