

Competitive modeling of heart rate in Brazilian juniors soccer players #40

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The heart rate (HR) has been used as indicator of competitive actions intensity in soccer players. The aim of this study was to analyze the competitive modeling of HR in eight Brazilian juniors soccer players (18.84 ± 1.04 years; 71.19 ± 8.60 Kg; 177.25 ± 6.04 cm) during a preparatory stage game. All were evaluated with Polar® heart rate monitor Team System model in five moments: warm-up (16min and 40s), recovery (8min and 15s), 1st half (48min), interval (7min and 45s), 2nd half (45min and 30s), and the heartbeats saved every 5 seconds. After collection, the data were kept in computational bank and it was produced tabular informations. The results are shown in the figure 1, through frequency percentage.

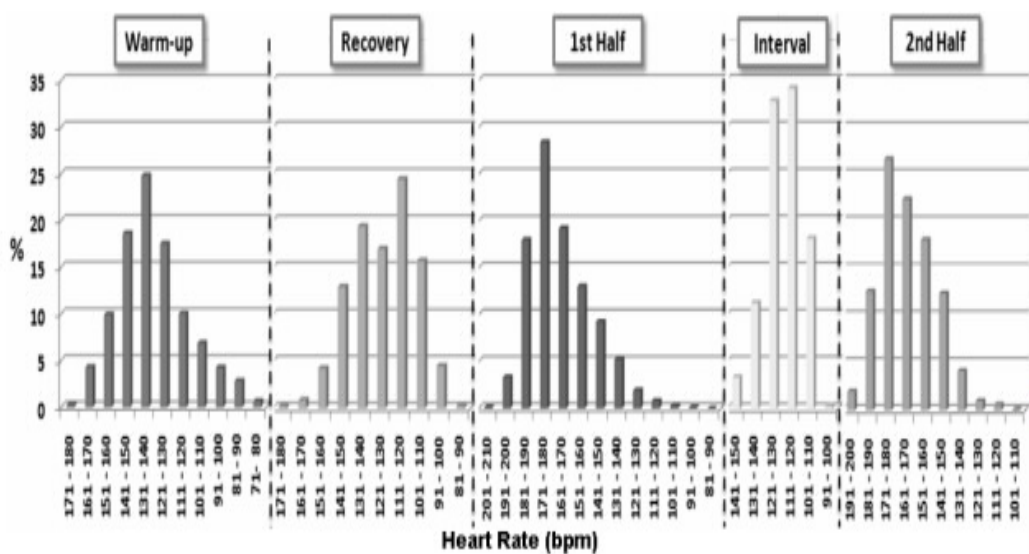


Figure 1. Intensity areas of competitive actions of soccer players during the game (n = 8). Percentage mean values of heart rate (HR) during warm-up, recovery, 1st half, interval and 2nd half.

The main results indicate that the competitive model of HR for juniors soccer players is characterized by intermittent actions, intersperse periods of low, average and high intensity. The predominance of actions in 1st half and 2nd half occur in HR of 171-180 bpm, in warm-up is 131-140 bpm, in recovery and interval are 111-120 bpm. Therefore, the knowledge of competitive activities of soccer players by HR

responses allows a better elaboration of training models according to competitive demand.

Key words: competitive modeling; heart rate; soccer.