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REAL PLAY TIME IN TABLE TENNIS MATCHES IN THE XXVIII OLYMPIC GAMES «ATHENS 2004»

Abstract

The modifications of Table Tennis regulations, with more important the end of games to 11 than to 21 points change appears to have changed the duration of match, with regard to both the total and also the real play time. The purpose of this study was to record the real play time that is required in order to come to an end a Table Tennis match as well as it realises, the existed changes in the real play time between the Men and the Women that took part in XXVII Olympic Games of Athens (2004). The play time differences at the development of organisation by the phase of first round up to the Quarterfinals were also studied. As sample was used the total of games that was carried out at the duration of Olympic Games in Athens (n=120), in Men (n=60) and Women (n=60) singles. The results showed, that the real play time of sets oscillated from 3:7" until 6:6" in total. The mean of duration of set was increased at the development of organisation up to the Quarterfinals. Men's pure play time was from 3:8" to 4:4" and Women's from 3:7" to 6:6". A difference in pure play time was noticed in Women and this might be a result of style of play. The real play time that was presented can be used as tool to training process.

Key words: *table tennis, real play time, Olympic Games.*

Introduction

Since October 2001 new regulations have been implemented by the International Table Tennis Federation (ITTF). The beginning was marked with the use of the bigger ball, from 38 to 40 mm and was followed by the scoring system which was increased to 11 points instead of 21 for each set, as well as the regulation related to service. Aim of these changes was to increase the attractiveness and popularity of the sport. The bigger and heavier ball would increase the length of time of rallies; the new scoring system would make players play their best from the beginning while service return would be easier. "The new scoring system might lead a narrower gap between the strong and the weak," said Chinese men's team coach Yin Xiao. "The new scoring system has disturbed the strategies that expert table tennis players habitually employ to determine effective strokes" said Seve, Poisat (2001).

XXVI "Athens 2004" were the first Olympic Games that were organized with new regulations. The fact that the rally time seems to be changed both in Men and Women must be in mind for individual technical and tactical players training programs.

Methods

The total of games that were carried out at the duration of Olympic Games in Athens (n=120), in Men (n=60) and Women (n=60) singles from groups to quarter-finals was used as a sample. Data was received from the official "Athens 2004" web page <http://www.athens.olympic.org>. DVD and video tapes verification was also conducted.

The process of collection of data was the following: each time an athlete that made service took the basic service position and simultaneously threw of the ball, was placed in use a digital chronometer. Stop of measurement was when ball fell on the ground, on the body of athletes or on the net. Time data collection was conducted with precision of seconds for set and minutes for games and was recorded on to special result form. No data collection was recorded in other cases of interrupt of the game such as let. No other factors such as time-out, changes of table side between sets were counted.

Results

From the analysis of the results it appeared that the mean of rally time is 4:18"±0:75" in sets and 22:5"±5:56" in Men games (table 1) and 5:04"±0:81" in set and 26:3"±7:29" in Women games. Respectively to duration the biggest matches took 38 and 41 minutes for Men and Women and the shortest were 9 minutes both for Men and Women. Table 1 and 2 show the detailed results of each round.

Table 1. Real play time (min) in Men.

Men	Play Time MAX	Play Time MIN	Set/Round (X±SD) SEC	Match/Round (X±SD) SEC
1 st Round	38'	9'	3:8"±1:27"	18:3"±7:90"
2 nd Round	34'	12'	4:17"±0:78"	22:1"±6:06"
3 rd Round	33'	17'	4:31"±0:72"	23:1"±6:58"
4 th Round	31'	18'	4:4"±0:74"	25:8"±5:23"
5 th Round	25'	21'	4:2"±0:14"	23:3"±2:06"
Total	Games Max	Games Min	Mean/Set	Mean/Games
	38'	9'	4:18"±0:73"	22:5"±5:56"

Fig.1 Real Play time (Games)/Round – Men.

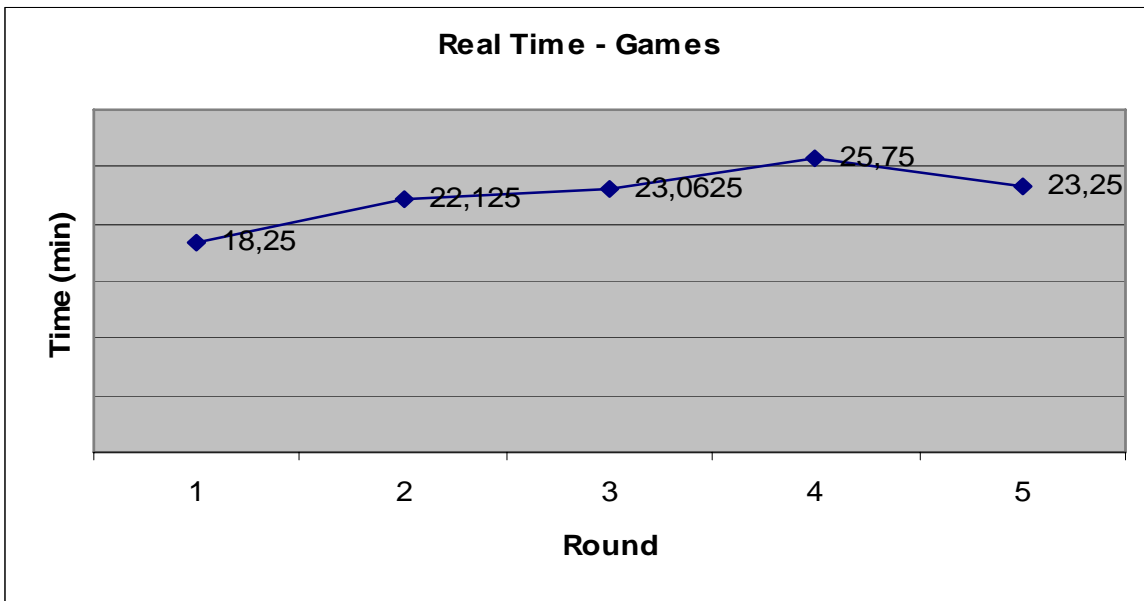


Fig.2 Real Play time (Set)/Round – Men.

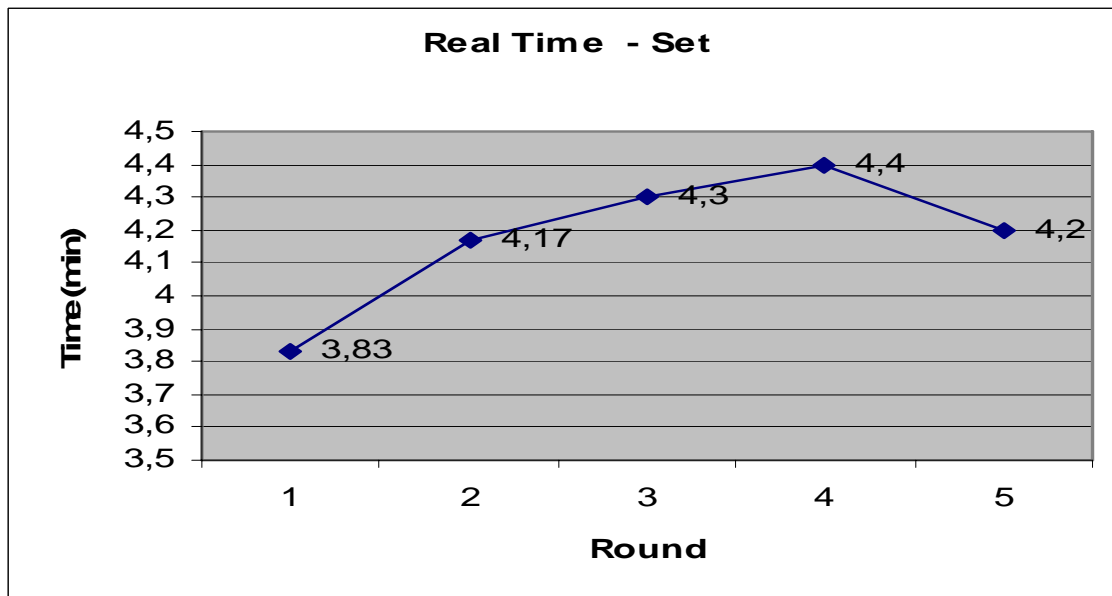


Table 2. Real Play Time (min) in Women.

Women	Play Time (X±SD) MAX	Play Time (X±SD) MIN	Set/Round (X±SD) SEC	Match/Round (X±SD) SEC
1 st Round	33'	9'	3:7"±0:82"	18:4"±7:32"
2 nd Round	35'	18'	4:5"±0:69"	25:1"±5:99"
3 rd Round	39'	16'	4:8"±0:72"	26:3"±7:09"
4 th Round	39'	17'	5:6"±1:09"	28:5"±8:38"
5 th Round	41'	24'	6:6"±0:76"	33:2"±7:71"
Total	Games Max	Games Min	Mean/Set	Mean/Games
	41'	9'	5:04"±0:81"	26:3"±7:29"

Fig.3 Real Play time (Games)/Round – Women

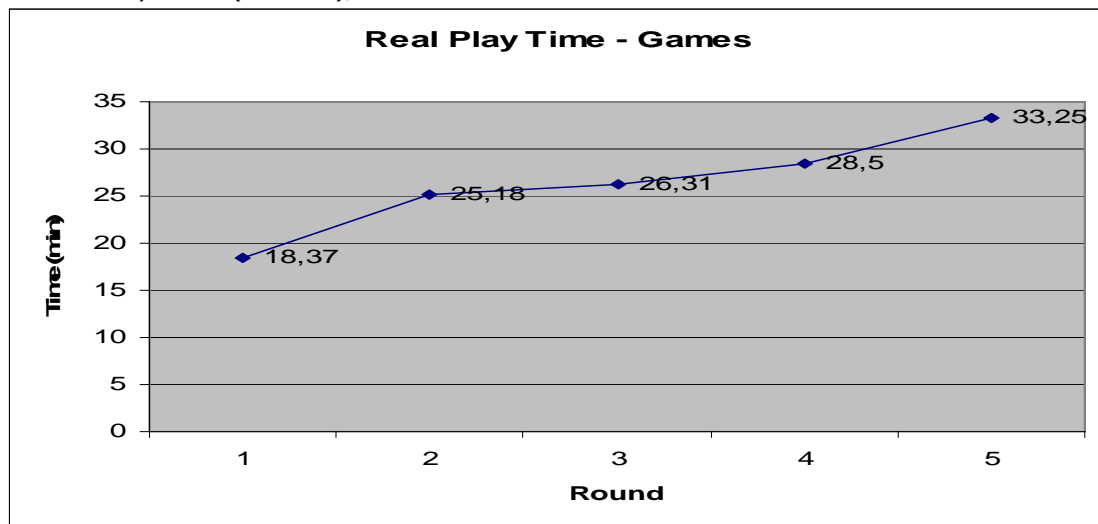
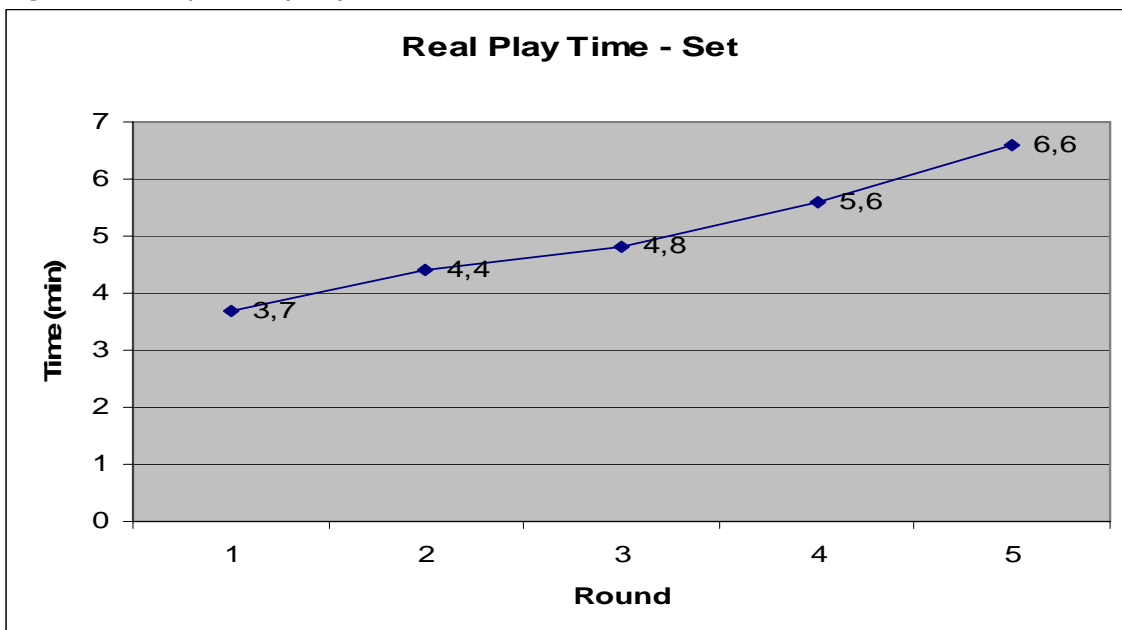


Fig.3 Real Play time (Set)/Round – Women



Discussion

The mean time of duration of set was increased during Olympic games up to the Quarterfinals in both Men and Women. For example, in the first round of Men games mean real play time was 3:8" in sets and 18:3" in matches while real play time increased to 4:4" and 25:8" in set and matches in round of 16. For Women mean of real play time in the first round was 3:7" in sets and 18:4" in match and it increased to 5:6" and 28:5" in round of 16. The augmentation of real play time could be accounted for the "knock out" system in which more high quality players play against each other after a few round, so matches take more time to finish.

Mean of rally time never goes under 20 minutes after the 1st round and this leads to the fact that tactical situation change more often, Zhang et al. (2003) which does not allow easy finishing or easy mistakes. Regarding to new regulations the status of server and receiver can not longer get information about opponent play Seve, (2003) and maybe this is one more reason that justifies the increase of rally time.

Women matches are longer than Men's. Although the mean of set duration in Women is almost the same as Men there is a difference in the mean of real play time of games. This difference becomes bigger after the first round of games and it is getting almost 2 minutes more in every round culminating in the quarter finals where the difference in mean is almost 10 (min). According to Takeuchi et al.(2001); Seve, (2001); Yquei,(2001); Zhang et al. (2001), it seems that there is an increase in rally time with the new 40mm ball which is bigger in Women's games, Takeuchi et al.(2001). From these maybe justified the fact that Women matches in Olympics Games were longer than Men. Also the technical and tactical style of Women is a factor that influences duration of games, Tang et al. (2001).

Duration of rally time has become longer thus the increase of total real play time. According to Yuza et al.(1992) a Table Tennis Match (best of 3, 38mm ball, 21 points) takes 28:40" \pm 7:35" to finish. Comparing it with current results we observe than mean of match of Olympic Games are 22:5" and 26:3". Respectively to Men and Women the max and min matches are 38' & 9' and 41' & 9'. So, maybe this is a clue that new counting system regulations have achieved longer rallies but shorter matches which probably lead to a more attractive sport.

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