Tennis masters. Nitto vs Next Generation ATP Finals

Alejandro Sánchez-Pay a, José Julián Navarro-Cuenca, & Bernardino J. Sánchez- Alcaraz a

a Department of Physical Activity and Sports, Universidad de Murcia, Murcia, Spain.

ABSTRACT

The objective of this study was to know the influence of the modification of the tournament regulations between the 2019 Nitto ATP Finals and Next Gen tournaments in relation to physical and technical parameters. In order to do this, 100% of the sets played (34 of the Nitto ATP Finals and 55 of the Next Gen) of a total of 30 matches were analysed. The data was selected from the information published on the Official Website of the Tennis ATP (https://atp.com/). The results of this study show that the specific tournament regulations in the Next Gen ATP Finals (matches to the best of 5 sets of four games, elimination of the advantages and use of the "golden point", and the no-let rule) could influence the duration of the match and the number of total break opportunities, although not significantly. The percentage of first serves was similar between both tournaments, so despite including the no-let rule, the time interruptions between the first and second serves were equivalent.

INTRODUCTION

Performance analysis (notational analysis, match analysis or performance analysis) aims to record and analyse behaviours and actions of athletes in real game situations. These types of indicators or variables that best represent the winner of a match may vary depending on the playing surface (Barnett, Meyer, & Pollard, 2008; Collinson & Hughes, 2003) or the gender of the players, among other aspects (Brown & O’Donoghue, 2008).

The ATP, as well as the different Grand Slam tournaments, include on their websites very detailed information on the actions that take place during the course of the match (Cross & Pollard, 2009). These data allow for subsequent further analysis of higher quality (Katić, Milat, Zagorac, & Durovic, 2011) which can be used to determine different influential aspects in the game.

The Masters Cup (current Nitto ATP Final) is the tournament that includes the 8 best players classified by ranking and has special intereturn due to its particular format (two groups of four players face each other in league format, the two being classified first of each group for the semi-finals), as well as the competition between the best players of the season. Since 2017, the ATP created a tournament similar to the masters Cup, which is played by the top 8 ranked in the ATP ranking under the age of 21, called Next Generation (Next Gen) ATP Final. This tournament has different regulations, such as: a) games played to the best of five set s, b) shorter sets format, best of four games with tie-break at 3-3, c) "golden point", and d) continuous play with the serve (no-let rule). These changes have the intention of creating a high-speed, cutting-edge format, to suit the needs and demands of television, and which is aimed to attract new and young sports fans. However, there is currently no study that has analysed the influence of the regulation changes of this 21&U tournament on the statistics of the competition. Therefore, the objective of this research will be to observe the differences between the Nitto and Next Gen ATP Finals tournaments, as well as to analyse the influence of the modification of the tournament regulations on the demands of the competition.
METHOD

Sample

The sample consisted of a total of 89 sets from the 2019 ATP Final tournaments (34 sets of Nitto and 55 sets of Next Gen). All matches included in each tournament were recorded and analysed.

Procedure

The statistics of the matches played in the Nitto ATP Finals tournament (n = 15 matches; 34 sets) and in the Next Gen ATP Finals tournament (n = 15 matches; 55 sets) were collected. The data was selected from the information published on the Official Website of the Tennis ATP (https://atp.com/). The selected variables were grouped into three blocks: temporal variables and game actions, variables related to performance on the serve and variables related to performance on the return of serve.

Statistical analysis

Firstly, the mean (M) and standard deviation (DT) were calculated on all the variables in the sample. Normality analysis was performed using the Kolmogorov-Smirnov test. The t-Student test was used to identify the differences between tournaments (Nitto ATP Finals and Next Gen ATP Finals) as well as to calculate the mean and percentage difference between the winner and loser between both tournaments. A significance level of $p < .05$ was established. The data was analysed using the IBM SPPS 20.0 statistical package for Macintosh (Armonk, NY: IBM Corp.).

RESULTS

Table 1 shows the differences in the physical parameters (points played, match duration, etc.) and in the variables related to the serve and the return depending on the tournament (Nitto and Next Gen ATP Finals).

| Table 1. Differences between Nitto and Next Gen ATP Finals. |
|-------------------------------------------------------------|
| **General variables**                                       |
| Nitto M (DT)       | Next t Gen M (DT) | Dif    | p     |
| Match duration (min) | 106.8 (39.51)    | 84.53 (20.88) | 22.27 | .064 |
| Set duration (min)  | 47.12 (12.14)     | 23.05 (5.24) | -14.07 | .000 |
| Sets played        | 2.35 (0.49)       | 3.71 (0.60) | -0.36 | .000 |
| Total P. played (per match) | 147 (43.5)     | 122.27 (28.77) | 24.73 | .077 |
| Total P. played (per set)       | 64.85 (14.13)    | 33.35 (7.09) | -31.50 | .000 |
| Games played (per set)           | 10.35 (2.00)     | 5.93 (0.94)  | 4.24  | .000 |
| **Service-related variables**                          |
| Aces               | 13.8 (4.71)      | 9.6 (4.97)     | 4.20  | .025 |
| Double faults      | 3.47 (2.07)      | 3.00 (2.07)    | 0.47  | .542 |
| Ratio ace : double faults | 5.24 (3.46) | 4.65 (4.47) | 0.59  | .691 |
| Points played 1st serve | 96.47 (25.36) | 78.07 (17.29) | 18.40 | .028 |
| 1 st serve (%)    | 66.24 (4.11)     | 64.54 (7.32)  | 1.70  | .439 |
| P. Won 1st serve | 71.33 (20.97)    | 56.67 (13.69) | 14.66 | .031 |
| P. Won 1st serve (%) | 73.49 (6.6)    | 72.33 (5.71)  | 1.15  | .613 |
| P. Played 2nd serve (%) | 44.2 (15.61) | 42.07 (9.72) | 3.46  | .354 |
| P. Won 2nd serve | 70.53 (19.27)    | 52.24 (6.08)  | 1.28  | .561 |
| P. Won 2nd serve (%) | 58.88 (10.4)  | 52.13 (6.08)  | 1.28  | .561 |
| P. Won serving | 48.67 (15.64)    | 42.07 (10.82) | 6.60  | .190 |
| P. Won serving (%) | 46.73 (5.17)   | 65.47 (4.05)  | 1.25  | .465 |

Legend. M: mean; DT: standard deviation; Q: points.
Table 2 shows the difference in average values between the winner and the loser of each tournament, as well as the comparison between both tournaments. The winners in Next Gen had 17% more points won per set than the losers, while the winners in Nitto had 11% more points than the losers, showing significant differences between both winners ($p = .037$).

Table 2. Comparison between tournaments depending on the different performance differences players (win/lose).

| Variables                           | Nitto M (DT) | Next Gen M (DT) | F    | p    |
|-------------------------------------|-------------|----------------|------|------|
| **General variables**               |             |                |      |      |
| Games won                           | 2.24 (1.13) | 2.16 (0.90)    | 0.110 | .741 |
| P. Won per match                    | 6.44 (4.15) | 5.09 (3.03)    | 3.135 | .080 |
| P. Won per set (%)                  | 11.69 (9.99)| 17.22 (13.04)  | 4.487 | .037 |
| **Variables related to the service**|             |                |      |      |
| Aces                                | .74 (3.44)  | .02 (2.04)     | 1.527 | .220 |
| Double faults                       | -.74 (3.44) | -.02 (2.04)    | .084  | .773 |
| Aces / double faults ratio          | .01 (12.84) | .07 (19.13)    | -.008 | .928 |
| 1st serve (%)                       | .09 (14.41)| .17 (19.53)    | 2.691 | .105 |
| P. Won 1st serve (%)                | .10 (16.41)| .18 (19.53)    | .663  | .418 |
| P. Won serving (%)                  | .10 (16.41)| .18 (19.53)    | .663  | .418 |
| **Variables related to the return** |             |                |      |      |
| Break point (%)                     | 35.88 (46.38)| 50.48 (44.48)  | 2.192 | .142 |
| P. Won returning                    | 3.21 (5.57) | 2.75 (2.98)    | .292  | .591 |

Legend: M: mean; DT: standard deviation; p = level of significance.

**DISCUSSION**

The rules and systems of competition in professional tennis have evolved in recent years. Some of the most significant changes include: the Davis Cup changed the system of playoff teams in 2019, the four Grand Slam had in 2019 a different regulation for the tie-break on the fifth set, or the inclusion of the golden point in all games of the doubles competition, with a supertiebreak in the third set. However, perhaps the tournament Next Gen ATP Finals is the one which includes more differentiating regulation changes to the Nitto ATP Finals, with matches played to the best of 5 sets with four games per set, the elimination of the advantages with the “golden point”, and the inclusion of the no-let rule.

As expected, the new competition format of the Next Gen tournament reduced the number and duration of sets, as well as the number of points and games played per set (Table 1). On the other hand, and although the duration of the match and the number of total points were lower in the Next Gen tournament when compared to the Nitto ATP Finals, these differences were not significant ($p > .05$). Thus, it could be argued the rule of including shorter sets of four games decreases the duration of the set, but not so significantly the duration of the match.

With regard to the serve statistics, fewer points played and won with the 1st serve were observed in the Next Gen as compared to the Nitto ATP Finals, which could be the cause also of the fewer number of aces in played this tournament. However, the data collected did not analyse the information related to the situation of the not let rule in the service, therefore, it cannot be concluded that these results are produced by the let rule. However, despite being able to serve without a let, in Next Gen matches no more aces were made, nor were higher values obtained in the number of points played with the first service or in the percentage of points won with the first service.

On the other hand, in the Next Gen event the number of break points won and played increased when compared to the Nitto (though not significantly). Therefore, despite including the golden point rule and playing fewer games per set (6 versus 10), from a statistical point of view, the number of opportunities to break in a match does not seem to increase.

Furthermore, the data from this study showed differences in the statistics between the winners and losers of the matches, as analysed by previous studies (Ferjan, 2001; Quereda-Sánchez, Courel-Ibáñez, Sánchez-Pay, Alfonso-Asencio & Sánchez-Alcaraz, 2020). It was observed that the winners of the matches in the Nitto tournament won approximately more than two games and six points per match than the losers, with very similar differences in the Next Gen tournament (Table 2). Significant differences were only found in the percentage of points won per set, with a difference of 5.5% between both tournaments. Therefore, in general, and given the similarity of values about the mean difference of winners over losers in each one of the two tournaments, the data confirmed a similarity in the statistics related to the performance of the players according to the match result in both tournaments (Table 2).

The results of this study have an important practical application for coaches and players in the design of training sessions and the preparation of matches adapted to the specific demands of the competition. For example, a good tactical and mental preparation of the points called key moment (such as the golden point) seems decisive, since it has been shown to be the influence of the marker (winning, drawing or losing), in addition to the importance of the type of Contested point can influence decision-making at pressure, affecting performance (Mesagno, Geukes & Larkin, 2015).
CONCLUSIONS

The results of this study show that the special regulations of the Next Gen ATP Finals tournament could influence the duration of the match and the number of total break opportunities, although not significantly. The percentage of first serves was similar between both tournaments, so despite including the no-let rule, the time interruptions between the first and second serves were equivalent.

REFERENCES

Barnett, T., Meyer, D., & Pollard, G. (2008). Applying match statistics to increase serving performance. Medicine and Science in Tennis, 13(2), 24–27.

Brown, E., & O’Donoghue, P. (2008). Gender and surface effect on elite tennis strategy. ITF Coaching and Sport Science Review, 46, 911.

Collinson, L., & Hughes, M. D. (2003). Surface effect on the strategy of elite female tennis players. Journal of Sports Sciences, 21(4), 266–267.

Cross, R., & Pollard, G. (2009). Grand slam men’s singles tennis 1991-2009 serve speeds and other related data. ITF Coaching and Sport Science Review, 16(49), 8–10.

Ferjan, R. (2001). Comparison of game characteristics of final matches at the US and Australian Opens in 2000 and 2001. University of Ljubljana, Faculty of Sport. Ljubljana

Katić, R., Milat, S., Zagorac, N., & Đurović, N. (2011). Impact of game elements on tennis match outcome in Wimbledon and Roland Garros 2009. Collegium Antropologicum, 35(2), 341–346.

Mesagno, C., Geukes, K., & Larkin, P. (2015). Choking under pressure: A review of current debates, literature, and interventions. In S. D. Mellalieu y S. Hanton (Eds.), Contemporary advances in sport psychology: A review New York: Routledge.

Quereda-Sánchez, I., Courel-Ibáñez, J., Sánchez-Pay, A., Alfonso-Asencio, M., & Sánchez-Alcaraz, B.J. (2020). Diferencias en las estadísticas de competición en tenis en el Abierto de Australia 2019 en función del género y del resultado del partido. Acción Motriz, 24, 29-35.