

Letter to the Editor

LEVEL OF ACHIEVEMENT MOTIVATION OF YOUNG TENNIS PLAYERS AND THEIR FUTURE PROGRESS

Dear Editor-in-Chief

Psychological factors influencing tennis performance have long been recognised (Crespo, 2002). As American champion Jimmy Connors put it in 1981: "Tennis is 90% mental" (Weinberg, 1988). Psychological issues with respect to tennis have also been addressed in a large number of scientific studies which have examined many of the mental characteristics during competition.

Motivation also attracted the attention of researchers. Taylor (1994) treated motivation as the base of a pyramid of towards success in tennis. Other important factors in this area include 'goal orientation', 'goal setting,' 'motivational climate' (Van Aken, 1994; Boyce et al. 2001) and 'burnout' (Gould et al., 1996; 1996; 1997. Despite our advances in the role psychology plays in elite tennis performance there are considerable gaps in our knowledge. Until now the vast majority of the research has been focused mental features such as "trainable" abilities. However, there is still little research on 'achievement motivation' - described as a psychological feature which has a character of 'lasting property'. Achievement motivation cannot be described as something that occurs during competition but mostly as a trait having 'permanent character,' - being formed during the preceding weeks, months and years. Therefore it is obvious that coaches may look for athletes who have had this characteristic at a high level from the very beginning and therefore do not need much psychological intervention. The lack of psychological knowledge by coaches in the area of 'motivation' is one of the main reasons for mistakes made in the talent identification process. It often causes disappointment of those players who are not predestined to practise high-professional tennis by the basics of their personality -these players who do not possess high level of achievement motivation do not reach the highest levels of the game despite good results at a young age.

Given this background it seemed desirable to conduct research to examine the influence of achievement motivation on tennis performance in young players. Those psychological properties

which are known to undergo little change with education or training, the "driving properties of the nervous system" (Schönborn, 1984) were examined. These properties also apparently determine the level of performance in tennis to a substantial degree (Schönborn, 1984; Czajkowski, 1995).

In order to test 'achievement motivation' a group of boys was made up of players aged between 11 and 14 years (n=185), taking part in tournaments organised by the Polish Tennis Association. On the basis of tournament results in players were placed by the Association into national rankings for the under 12 and under 14 age groups in the years 1990-1994. This process allowed us to investigate the relation between tennis performance and 'achievement motivation'. In order to measure achievement motivation a questionnaire constructed by Widerszal-Bazyl (1978) was used. This consisted of 20 questions concerning 'aspiration level', 'conformity', 'ability to postpone gratification', 'self believe', 'time perspective', 'Zeigarnik effect' and 'mental endurance'.

In order to examine the influence of achievement motivation on tennis performance the players were divided into two groups:

- Group A (n = 11), players who eventually reached international level (in the top 800 on WTA/ATP professional rankings) at the age of 18-20, i.e. 6 to 10 years after the questionnaire was completed

- Group B (n = 174), players who never reached international level.

The results of a Student's *t*-test showed that the players who later reached international level in tennis (Group A, 73.3±3.8) possessed significantly higher ($p < .01$) level of achievement motivation than the players who never reached international level (Group B, 66.1±4.6).

The results indicated that players from Group A generally possessed very high level of achievement motivation. It suggests that the high level of achievement motivation supported sport development of players from Group A and was one of the reasons of their progress.

Achievement motivation is an essential element of human personality. It directs a person's

activity and makes it more (or less) dynamic. Without the desire to succeed other psychological features and abilities do not provide nearly so much influence on performance. Achievement motivation influences other factors affecting performance in sport like: physical preparation, technique, tactics and even life style (Gracz and Sankowski, 1995). This property, the "driving power of activity", should be understood as the joint function of the motive power (which is a permanent property of personality) and the consequences of what a given individual expects of his own actions (Atkinson and Feather, 1966). This action is a product of two tendencies: 1) to achieve a success and 2) to avoid a failure. People with greater achievement motivation prefer tasks and situations where they can influence the result and their actions are successful (Gracz and Sankowski, 1995). Such people continue long-lasting insoluble tasks more effectively and reveal greater persistence (Atkinson and Feather, 1966). Situations similar to this are dominant in sports performance. They occur e.g. even at the matches during a Davis Cup Tie, where players feel great responsibility and emotion about the result. Thus those tennis players who attain international status may be characterised by high levels of achievement motivation.

These observations were confirmed in research on tennis players conducted by Butt and Cox (1992). The results indicated a higher level of achievement motivation among top class tennis players in relation to university players in the USA. Similar relationships were described by Schönborn (1984). On the other hand, the so-called negative motivation is characteristic of people with low achievement motivation, who are not confident and want to avoid a failure. In a match situation it usually evokes excessive stimulation and lowers the quality of sports performance. In the long term this often leads to a lack of progress or even giving up practising.

High achievement motivation often manifests in an optimum level of stimulation in difficult situations and in realistic levels of aspiration (Czajkowski, 1995). The analysis indicates that achievement motivation can be identified as one property which determines the progress of young players with serious aspirations to play at international level.

The influence of psychological aspects on tennis performance increases with age (Schönborn, 1993). It was also widely reported (Schönborn, 1993; Crespo and Miley 1998) that after the age of 15-16 years mental ability becomes one of the most important factors influencing tennis performance. Therefore achievement motivation should be added to the other important components which influence

tennis performance and coaches should consider measuring the level of this achievement motivation during talent identification

This study as shown:

1) Junior players who eventually reached international level in tennis 8 to 10 years after the test questionnaire possessed significantly higher levels of achievement motivation compared with those who did not reach international level.

2) The results provided evidence that high achievement motivation is an important factor influencing tennis performance.

3) In the talent identification process it is important to measure achievement motivation at the early stages of a tennis career because it would strongly determine future performance.

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