

A profile of Paweł Nastula's individual technical-tactical preparation

Authors' Contribution:

- ☑ **A** Study Design
- ☑ **B** Data Collection
- ☑ **C** Statistical Analysis
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Abstract

Background & Study Aim:

Effectiveness of the technical-tactical preparation in competitors, who took part in the most important sport competitions, was analysed and examined by many researchers. The assessment of individual technical-tactical preparation (TTP) is also of great importance. Especially, in those who achieve the highest sport success. The assessment is made by recording and analysing many contests and effective attacks. Paweł Nastula won a gold medal at the Olympics, two gold medals at the World Championships, three gold medals at the European Championships, and thirteen gold medals won at the individual Polish championships. He was among the fifty best judo competitors in the world. He was one of the most popular Polish sportsmen. Aim of the study is answer to the question: What profile of Paweł Nastula technical-tactical preparation was a source of his great success? What value of the TTP indices did he achieve during contests? Which techniques allowed him to achieve such effective contest performance?

Material & methods:

The analysis of 98 contests played from 1991-1992 during 24 sport tournaments was the research material. Within that period Nastula effectively performed 145 attacks by means of judo techniques and he scored 1022 referee points. The methods used in study allowed to determine his dominant techniques and the value of indices of the individual technical-tactical preparation.

Results:

Paweł Nastula effectively used 25 judo techniques. A seoi nage throw was his favourite technique and some techniques from ashi waza and te waza (leg and hand techniques respectively). He was highly efficient at katame waza (grappling techniques). While applying throws, he used his right and left body sides when throwing towards four directions. Loss of points resulted from referee's penalties, not due to opponents' attacks.

Conclusions:

A profile of individual technical-tactical preparation of that competitor allows us to determine standard value. The value of indices of the sport preparation and his tokui waza (favorite technique) may be used as a criterion of control of individual preparation in judo competitors.

Key words:

combat sport • individualization • tokui waza

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Individualization – a process of teaching and determining the individual features

A competitor's profile – a range and type of the techniques applied

INTRODUCTION

Many researchers have undertaken attempts at determining qualities attributed to technical-tactical preparation in judo competitors, who took part at the greatest judo tournaments [1-13]. The authors determined the dominant techniques from the observed competitions. The techniques which were used, both

by winners and their opponents. The techniques applied by female and male competitors from various age and weight categories. In this work we have attempted to determine a profile technical-tactical preparation (TTP) of one competitor – Paweł Nastula. The determination of his profile was carried out on the basis of the efficiently executed techniques, which

had been recorded during the judo competitions from 1991 to 1992. He has been classified among the best fifty judo competitors in the world [14]. Aim of the study is answer to the question: What profile of Paweł Nastula technical-tactical preparation was a source of his great success? What value of the TTP indices did he achieve during contests? Which techniques allowed him to achieve such effective contest performance?

MATERIAL AND METHODS

The research material was recorded in the years of 1991-1992, during that period the competitor took part in 24 tournaments, both home and abroad. He played 101 contests, of which he won 87 and lost 14 (98 contests were analysed). He was awarded sport classes according to the Polish Judo Federation standards (<http://www.pzjudo.pl>): 5 times international champion class, 14 times champion class, and twice 1st sport class, taking part under 95 kg weight category and in open category.

Methods

The techniques classification has been done in accordance with the Kodokan Judo [15], and names and spelling of the techniques have been adopted to the Kawamura- Daigo Japanese-English dictionary [16]. Assessment of judo techniques has been carried out according to sport and judge regulations ([ww.pzjudo.pl](http://www.pzjudo.pl) and www.ijf.com). Three criteria were used to decide the sequence of dominant techniques (K):

- K1 – number of techniques assessed by *ippon*,
 - K2 - number of techniques effectively performed,
 - K3 – points scored by efficiently applied techniques
- $K = K1+K2+K3$ [17]

The value of efficiency attack index (Sa) is the number of points scored for efficiently executed techniques per one contest [18].

$$Sa = \frac{3 \times M + 5 \times M + 7 \times M + 10 \times M}{n}$$

M - number of effective attacks

n – number of contests

koka: 3 pts., *yuko*: 5 pts., *waza ari*: 7 pts., *ippon*: 10pts., auxiliary points (referee’s) for efficient attacks, and the same points lost due to penalties for violating rules: *shido* 3 pts., *chui* 5 pts., *keikoku* 7 pts., *hansoku make* 10 pts., disqualification.

Directions and ways of the executed techniques were determined by *kuzushi* (breaking opponent’s balance) [19] and a part of the body used while applying a particular throw [20, 21]

RESULTS

During the analysed period the competitor effectively used 25 judo techniques. He effectively executed 145 attacks and scored 1022 pts. His opponents performed 20 effective attacks scoring 120 pts. He was 35 times penalized for prohibited actions and lost 129 pts., and his opponents lost 90 points by penalizing Nastula’s dominant technique was a *seoi nage* throw. He applied the throw most often and scored most points 20 times efficiently scoring 138 pts. (Table 1). He was also very efficient at applying leg and hand throws which were of 87.93% of scored points by efficiently throws performed Sa (Figure 1). The value of the Sa index which exceeded 0.5 pts. allows to determine the following grappling techniques: *juji gatame*, *kami*

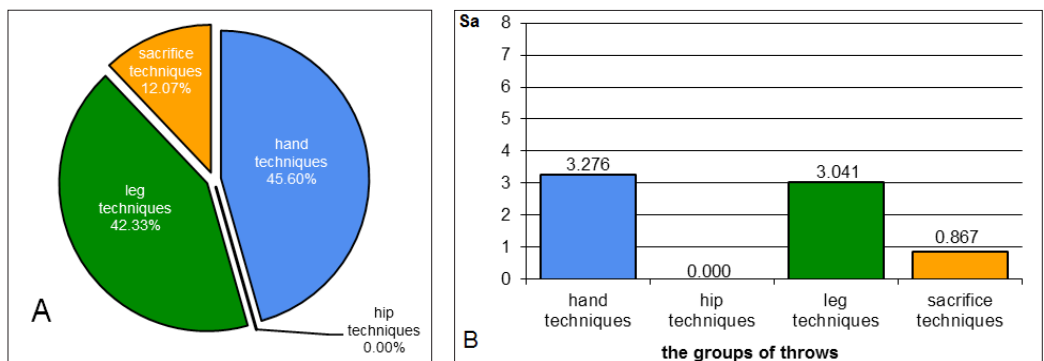


Figure 1. The percentage of throws hand, leg, hip, sacrifice techniques (A) and efficiency (Sa) of throws hand, leg, hip and sacrifice techniques (B)

Table 1. Paweł Nastula dominant techniques (based on the contest observations from 1991 to 1992)

| K | Techniques | Number of assessed attacks | | | | K1 | K2 | K3 |
|----|----------------------|----------------------------|----------|------|------|------|----|----|
| | | ippon | waza ari | yuko | koka | | | |
| 1 | seoi nage | 8 | 3 | 5 | 4 | 1 | 1 | 1 |
| 2 | kosoto gari | 4 | 4 | 4 | 0 | 7 | 3 | 2 |
| 3 | juji gatame | 8 | - | - | - | 1 | 8 | 4 |
| 4 | kuchiki taoshi | 3 | 2 | 7 | 3 | 8 | 2 | 3 |
| 5 | tani otoshi | 5 | 1 | 4 | 1 | 5 | 5 | 4 |
| 6 | kami shiho gatame | 6 | 2 | 1 | 0 | 3 | 7 | 6 |
| 7 | uchimata | 5 | 1 | 3 | 1 | 5 | 6 | 7 |
| 8 | kuzure kesa gatame | 6 | 2 | 0 | 0 | 3 | 8 | 8 |
| 9 | ouchi gari | 2 | 1 | 4 | 6 | 10 | 4 | 9 |
| 10 | tate shiho gatame | 3 | 1 | 0 | 0 | 8 | 11 | 11 |
| 11 | sukui nage | 2 | 2 | 3 | 0 | 10 | 10 | 10 |
| 12 | kata gatame | 2 | 0 | 1 | 0 | 10 | 13 | 12 |
| 13 | yoko shiho gatame | 2 | 0 | 0 | 1 | 10 | 13 | 13 |
| 14 | osoto gari | 0 | 2 | 1 | 1 | (17) | 11 | 14 |
| 15 | kosoto gake | 1 | 0 | 1 | 0 | 14 | 16 | 15 |
| 16 | kouchi gari | 0 | 1 | 1 | 1 | (17) | 13 | 15 |
| 17 | sasae tsurikomi ashi | 1 | 0 | 0 | 1 | 14 | 16 | 17 |
| 18 | tai otoshi | 0 | 1 | 1 | 0 | (17) | 16 | 18 |
| 19 | morote gari | 0 | 1 | 0 | 1 | (17) | 16 | 19 |
| 20 | seoi otoshi | 1 | 0 | 0 | 0 | 14 | 21 | 19 |
| 21 | kibisu gaeshi | 0 | 0 | 0 | 2 | (17) | 16 | 21 |
| 22 | harai tsurikomi ashi | 0 | 0 | 1 | 0 | (17) | 21 | 22 |
| 22 | soto makikomi | 0 | 0 | 1 | 0 | (17) | 21 | 22 |
| 22 | uki otoshi | 0 | 0 | 1 | 0 | (17) | 21 | 22 |
| 25 | sumi otoshi | 0 | 0 | 0 | 1 | (17) | 21 | 25 |
| | TOTAL | 59 | 24 | 39 | 23 | | | |

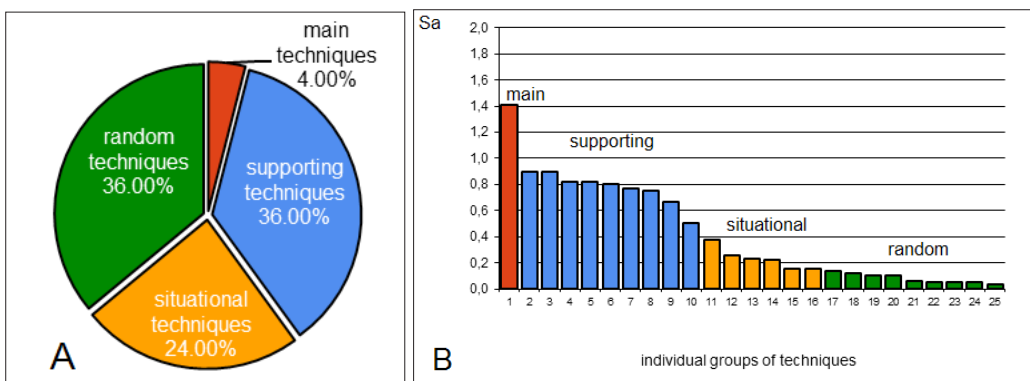


Figure 2. The percentage of individual of groups techniques: main techniques, random techniques, situational techniques, supporting techniques (A) and efficiency (Sa) main techniques, random techniques, situational techniques, supporting techniques (B)

shiho gatame, kuzure kesa gatame and throws: *kosoto gari, kuchiki taoshi, tani otoshi, uchimata, ouchi gari, sukui nage* as the auxiliary – supplementary techniques. The point value of (Sa) index which exceeds 0.15 pts. allows to determine the other techniques called “situational” ones: *tate shiho gatame, kata gatame, yoko shiho gatame, osoto gari, kosoto gake, kouchi gari*. The techniques which the Sa index does not exceed 0.15 pts., were determined as the random techniques: *sasae tsurikomi ashi, tai otoshi, morote gari, seoi otoshi, kibisu gaeshi, harai tsurikomi ashi, soto makikomi, uki otoshi, sumi otopshi* (Table 1, Figure 2).

The competitor was highly efficient at *katame waza*, particularly at applying *osaekomi waza* (immobilizations) and *kansetsu waza* (armlocks) (Figure 3,4). He more efficiently applied throws without body pivot 65.91% Sa, breaking opponents balance backwards – onto the heels 55.68% Sa (Figure 5, 6). He was versatile in applying throws, i.e. he used both sides of his body while attacking (Figure 7). The dominant direction of throws was that the left rear (LT) Sa 2,582 points, where he executed throws such as: *kosoto gari*

and *gake, ouchi gari* – with his right leg and *kuchiki taoshi* (Table 1, Figure 8). He lost points due to the referee penalties because of lack of activity.

DISCUSSION

Paweł Nastula in 1990 completed his junior career and, aged 20, had two bronze medals which he won at the Junior European Championships in 1989 and in 1990 (under 86 kg weight category) and two bronze medals which he won at individual senior Poland’s championships. From 1991 he started in a “new” weight category (under 95 kg), where he achieved great success.

Paweł Nastula was considered to be one of the best judo competitors both in Poland and in the world. He significantly prevailed over his opponents in terms of technical skills and the value of indices of technical-tactical preparation [22-24]. He was highly efficient at *katame waza* (grappling techniques), particularly *osaekomi waza* and *kansetsu waza* (immobilizations and armlocks) (Figure 3,4). A *seoi nage* throw was his favourite

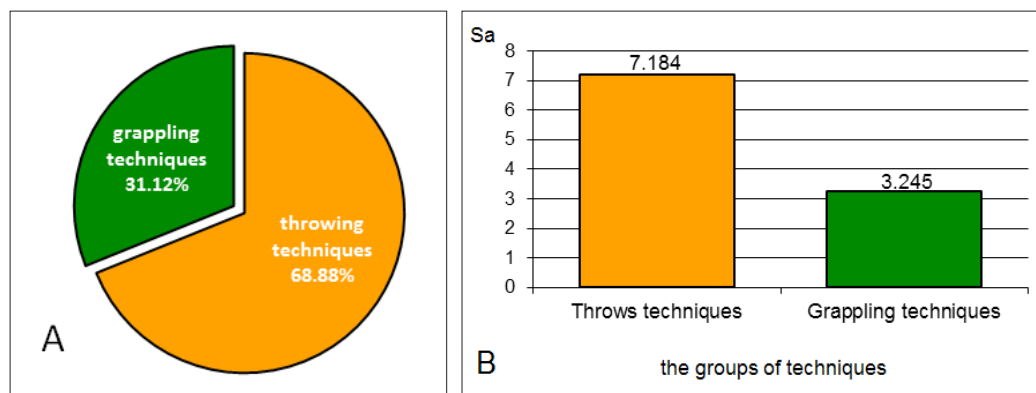


Figure 3. The percentage of throws and grappling techniques (A) and efficiency (Sa) of throws and grappling techniques (B)

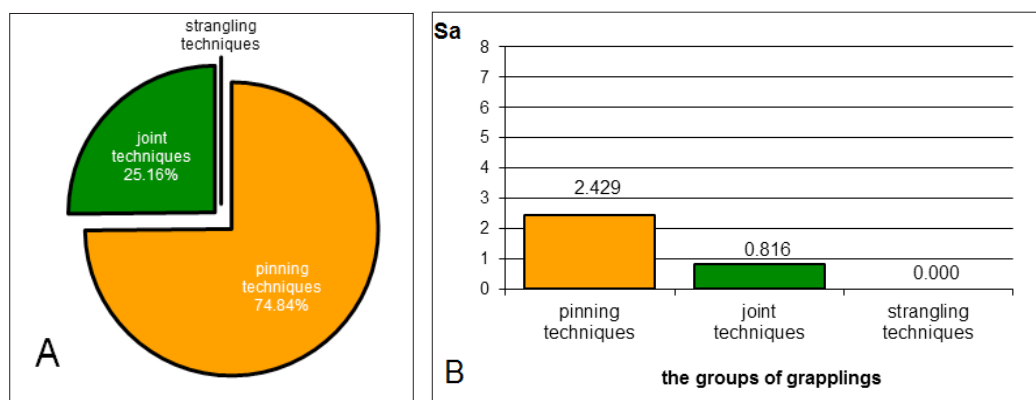


Figure 4. The percentage of grappling techniques: pinning, strangling, joint (A) and efficiency (Sa) of pinning, strangling, joint (B)

technique. A wide range of applied techniques and a high value of their attacks (Table 1, Figure 2) gave him superiority over his opponents. High efficiency of his techniques: *kosoto gari*, *juji gatame*, *kuchiki taoshi*, *tani otoshi*, *kami shiho gatame*, *uchi mata*, *kuzure kesa gatame*, *ochi gari*, *sukui nage* allowed to determine them as the auxiliary, supplementary of attacking. The techniques which P. Nastula performed not frequently but efficiently, we can describe them as situational ones, or randomly performed. He made use of his opponents' errors to his advantage in executing techniques [16]. Additionally, he efficiently applied throws using both sides (right, left) of his body, and different directions of attacks (Figure 2,5-8).

Observations related to the period when Nastula commenced his brilliant career in judo. In the years of 1991-1992 he had his first sport success during great sport events: 5th place at the Olympics in Barcelona, 2nd place at the World Championships in Barcelona, 1st place at the Jigoro Kano Tournament in Tokyo, 1st place at the Warsaw Tournament, three-time he took the first place at the individual Poland's

Championships. But, it was just the beginning of his great career. During five years his technical skill was brilliant, and from 1995-1997 he remained unbeatable in the 95 kg weight category – he won the gold medal at the Olympics in Atlanta, he was the world's champion twice, three times he was a champion of Europe, and thirteen times he won the title of Poland's champion.

Many great competitors, after completing their sport careers, demonstrate their favourite techniques and the ways of applying them [25-36]. Paweł Nastula also demonstrated his favourite techniques in the book "My judo" [37]. Was the end of great sport success caused by introduction of new weight categories? His weight category ranged from 86 kg to 95 kg; whereas the new category (introduced in 1998) ranged from 90 to 100 kg. Was the end of his success the natural way of playing sports? Will a Polish competitor achieve more than Nastula did in Judo? At present there is no answers to these questions. But it is good to know the features of Nastula's technical-tactical preparation which enabled him to achieve great success in judo.

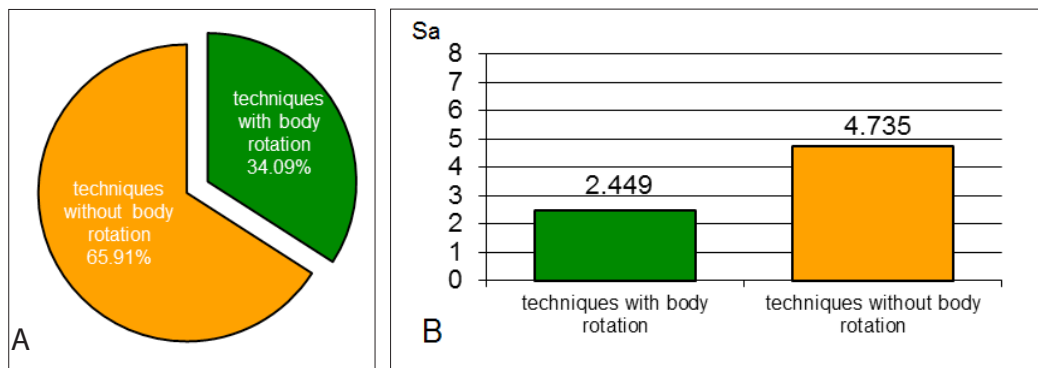


Figure 5. The percentage of body rotation and of body without rotation techniques (A) and efficiency (Sa) of body rotation and of body without rotation techniques (B)

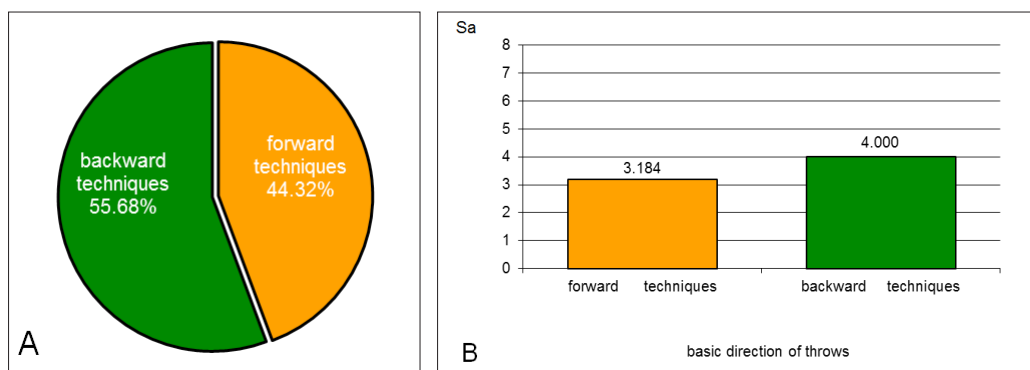


Figure 6. The percentage of forward and backward techniques (A) and efficiency (Sa) basic directions of forward and backward techniques (B)

CONCLUSIONS

The indices of individual technical-tactical preparation of Paweł Nastula allow us to determine a profile of training and standard value for competitors who are trying to achieve sport success. Paweł Nastula had high efficiency in performing both throws and grappling techniques. The most efficiently he performed hand throws: *seoi nage*, *kuchiki taoshi* as well as leg throws: *kosoto gari*,

uchimata. He had a wide range of the techniques used. High efficiency of throws and grappling techniques, allowed him to attack in various, directions using both (left and right) sides of his body. The efficiency of Nastula's judo techniques resulted from his personal features. But his technical-tactical skills were the crucial elements which enabled him to achieve great sport success during many judo tournaments.

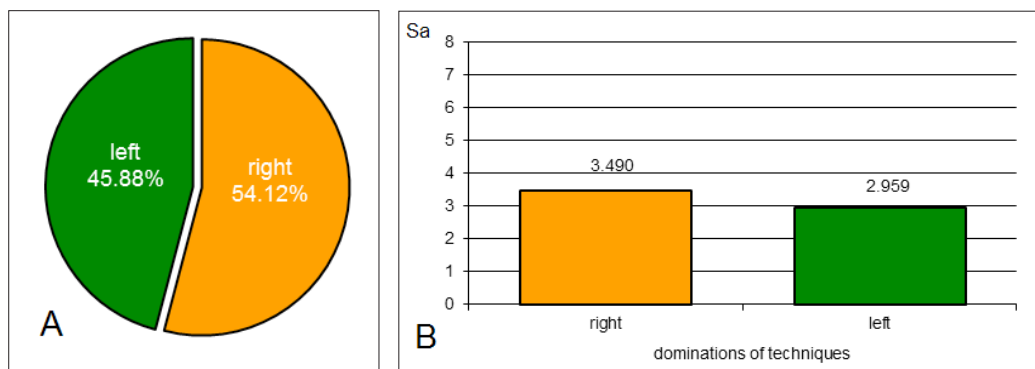


Figure 7. The percentage of performed with the domination techniques of the right and left sides of the body (A) and efficiency (Sa) of performed with the domination techniques of the right and left sides of the body (B)

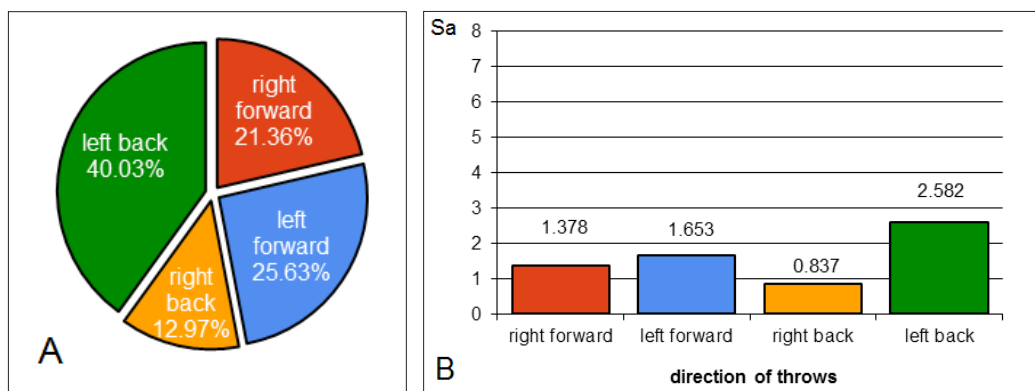


Figure 8. The percentage performed in different directions of throws (A) and efficiency (Sa) performed in different directions of throws (B)

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