The estimation of health-related behaviours of male judokas

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Summary

Introduction. Practicing sports is connected not only with the regular training, but also with the working out proper nutrition habits, sleep hygiene and prophylaxis of seasonal illnesses. The aim of this work was the estimation of health-related behaviours among young male practitioners of judo compared to non-sports men.

Material and methods. The research was conducted on 120 men aged 17-35 years, practicing judo (n=75) and the non-sports ones (n=45). In comparative aims the examined men were divided into groups where the criteria accepted were: the age, training advancement, the sports-level and the frequency of trainings. The investigative tool was the Inventory of Health-Related Behaviour by Juczyński (where the behaviours are rated in four categories: eating habits, prophylaxis behaviours, and positive attitude and health practices. Differences between the data were qualified with the T-student test for independent groups, where the level p≤0.05 was accepted as of minimum significance one.

Results. The level of declared behaviours and health-related activities among the examined judokas was on the average level (the value of the HRB indicator for the whole group was 77.11). Statistically higher (p<0.05) level of health-related behaviours was noted in the group of judokas. Taking into account the division into subgroups, the greatest difference (p<0.05) in the value of general indicator of health-related behaviours was observed comparing the competitors according to their sports-level. Furthermore, the essential differences were observed between the juniors and the seniors – within the range of prophylaxis behaviours and positive attitude, between the medallists and the non-medallists – within the range of nutritional habits and positive attitude.

Conclusions. It was proved that competitors of a higher sports-level had been characterized with the higher level of health-related behaviours. Therefore health-related education seems legitimate also among sportsmen, first of all on the initial, comprehensive stage of the instruction.

Judo is modified form of the old Japanese martial art – ju-jitsu. The goal of the creator of judo – Jigoro Kano, was the creation of wholly developmental, utilitarian system of exercises, applied in the physical education of children and young people, the defensive instruction of police- and military formations, and also disciplines of sport in the Olympian dimension and recreational one. Judo can be practiced by men in every age, of different physique and different fitness level. For Jigoro Kano, judo was not only the martial art, but also the kind of specific philosophy. Students of his school were obliged to obey strict regulations instituted by the master. The word 'judo' in the literal translation from Japanese means 'the way' (a rule, manner) of gentleness (agility, compliance). The idea of judo according to his creator had to be the fight with the utilization of the opponent's power [4,5]. In the judo train-
The important part is played by intellectualization, and the rules of judo (‘give way to win’, ‘maximum efficiency – minimum effort’, ‘perfect yourself’) refer not only to exercises on tatami, but also to everyday life [6,7].

The aim of this research was the estimation of chosen health-related behaviours of young men practicing judo. Moreover a comparison of the level of health-related behaviours was made among the examined men, who were divided into groups, according to the age, sports-level, training advancement, and the frequency of trainings.

Material and methods

120 men partook in the research. They were 18-35 years old (averagely 23.87 ±4.89). Among them there were 75 judo competitors and 45 non-sports persons. The body mass of the study group was averagely 78.74 kg ±11.68; the height was 179.08 cm ±7.21 (Tab. 1). There were 31 medallists of championships of Poland and international tournaments among the examined judokas (MM, M or I sports-class). The detailed biometrical characterization of the competitors, with the regard of the division to subgroups, was placed in the Table 2.

The investigative tool was the Inventory of Health-Related Behaviours by Juczyński (where health-related behaviours were rated in four categories: eating habits, prophylaxis behaviours, and positive attitude and health practices. The questions in the inventory refer to four categories of health-related behaviours (HRB): proper nutritional habits (NH) that is the kind of consumed food, the frequency of meals, prophylaxis behaviours (PB) that is abiding by health recommendations, learning about health and illness, positive attitude (PA) that is avoidance of strong excitements, tensions, stresses, and health practices (HP) that is everyday activities containing physical activity, sleep and recreation [8]. Additionally the author’s questionnaire containing the biometrical information was carried out.

Standard statistical tools were used in the compilation of the material– the arithmetical mean together with the standard deviation. Dependences between the features were qualified by means of the Pearson’s correlation. Differences among each data were counted with the use of T-student test for independent groups. The level p≤0.05 was fixed as of minimum significance one.

Results

On the ground of gathered data with help of the Inventory Health-Related Behaviours it was determined that the level of declared behaviours and health-related actions among the studied groups was on the average level (the value of the HRB indicator for the whole group was 77.11). The groups differed statistically in respect of health-related behaviours (p=...
The general HRB indicator carried out 78.61 among the judo competitors and 74.61 among the non-sports persons. The essential differences were noted also in categories of prophylaxis behaviours (PB) and health practices (HP). The highest notes were obtained by the studied judokas in the category of positive attitude, and the lowest in nutritional habits and prophylaxis behaviours. The non-sports men obtained the highest result also in the category of positive attitude, and the lowest in the category of prophylaxis behaviours (Fig. 1).

The analysis of results, taking into account the division of judokas into subgroups, brings to light certain dependences. With the higher level of health-related behaviours were characterized competitors from the group of seniors – above 21 years old. (The difference was close to statistically essential p=0.066). The essential differences between juniors and seniors were noted within the range of prophylaxis behaviours and positive attitude. The greatest difference of the value of the general indicator of health-related behaviours was observed comparing competitors in respect of the sports-level. The group of 'medallists' was characterized with the higher level of nutritional habits and positive attitude. In remaining HRB categories differences were close to statistically essential. No characteristic differences among groups of different training advancement were brought to light, in none of the HRB categories. Instead, competitors training more often characterized themselves with the higher indicator of prophylaxis behaviours and with the lower of health practices (Tab. 3).

The level of health-related behaviours expressed with the general indicator of HRB positively correlated with the age of the examined competitors. There was also observed an essentially positive correlation between the age and the training advancement and the estimation of positive attitude, and negative one between the frequency of trainings and the estimation of health practices (Tab. 4).

Tab. 3. Level of health-related behaviours of examined judokas (divided into subgroups)

<table>
<thead>
<tr>
<th>age</th>
<th>NH</th>
<th>PB</th>
<th>PA</th>
<th>HP</th>
<th>HRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>seniors</td>
<td>3.26±0.75</td>
<td>3.35±0.78</td>
<td>3.62±0.61</td>
<td>3.30±0.53</td>
<td>81.40±12.29</td>
</tr>
<tr>
<td>juniors</td>
<td>3.07±0.59</td>
<td>3.01±0.69</td>
<td>3.26±0.63</td>
<td>3.40±0.48</td>
<td>76.52±9.36</td>
</tr>
<tr>
<td>difference</td>
<td>0.22</td>
<td>0.05</td>
<td>0.022</td>
<td>0.441</td>
<td>0.066</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>sports level</th>
<th>NH</th>
<th>PB</th>
<th>PA</th>
<th>HP</th>
<th>HRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>medalists</td>
<td>3.40±0.69</td>
<td>3.35±0.76</td>
<td>3.65±0.59</td>
<td>3.22±0.51</td>
<td>81.91±11.93</td>
</tr>
<tr>
<td>non-medalists</td>
<td>2.98±0.61</td>
<td>3.02±0.71</td>
<td>3.23±0.62</td>
<td>3.45±0.48</td>
<td>78.28±9.59</td>
</tr>
<tr>
<td>difference</td>
<td>0.009</td>
<td>0.063</td>
<td>0.005</td>
<td>0.071</td>
<td>0.034</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>training experience</th>
<th>NH</th>
<th>PB</th>
<th>PA</th>
<th>HP</th>
<th>HRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥10 years</td>
<td>3.24±0.7</td>
<td>3.24±0.77</td>
<td>3.5±0.71</td>
<td>3.31±0.47</td>
<td>79.87±11.81</td>
</tr>
<tr>
<td>&lt;10 years</td>
<td>3.06±0.62</td>
<td>3.06±0.7</td>
<td>3.28±0.54</td>
<td>3.41±0.54</td>
<td>77±9.57</td>
</tr>
<tr>
<td>difference</td>
<td>0.214</td>
<td>0.292</td>
<td>0.138</td>
<td>0.413</td>
<td>0.248</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>amount of trainings per week</th>
<th>NH</th>
<th>PB</th>
<th>PA</th>
<th>HP</th>
<th>HRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥4 trainings</td>
<td>3.25±0.68</td>
<td>3.31±0.74</td>
<td>3.48±0.69</td>
<td>3.24±0.49</td>
<td>79.97±11.46</td>
</tr>
<tr>
<td>&lt;4 trainings</td>
<td>3.01±0.63</td>
<td>2.91±0.69</td>
<td>3.28±0.54</td>
<td>3.52±0.48</td>
<td>76.44±9.76</td>
</tr>
<tr>
<td>difference</td>
<td>0.129</td>
<td>0.019</td>
<td>0.171</td>
<td>0.018</td>
<td>0.16</td>
</tr>
</tbody>
</table>
Discussion

Martial sports can be practiced at every age. The exercising of elements of martial arts is introduced to motor classes both for pre-school children, as well as older persons, healthy and handicapped [9,10,11]. They can be so called life sports almost for everyone. Professor Jigoro Kano – the creator of judo, defined judo first of all as the system of physical education which bears on development of character, shapes qualities of personality, teaches self-observation, concentration and reduces the level of fear [4,12,13,14]. Martial arts are associated mostly with the defensive education; however the research proves that the major reason of taking up trainings is a wish of development of physical fitness. This has an immediate relationship with the health [15]. The study of lifestyles of different social groups, confirm that physically active persons mind more often the composition of diet, avoid stimulants, are professionally and socially active [16,17,18]. Although this refers in the greater degree to persons practicing a recreational physical activity what was partly brought to light also by own research (frequency of trainings correlated negatively with the level of health practice indicator [19].

Some regular judo training may contribute to the change of a lifestyle what was confirmed by own research. Many authors evidence the influence of sports and martial arts on the reduction of unhealthy habits, handicaps of movement apparatus, and also the mental sphere [20,21,22]. Therefore, their elements are used in treatment and rehabilitation [10,23,24, 25,26].

Conclusions

1. The competitors of the higher sports-level were characterized also with the higher level of health-related behaviours what may prove the influence of a lifestyle on the sports-result.

2. The age and the training advancement correlated positively with some elements of health-related behaviours. This might be a proof of intellectualisation of the training process and influence of habits desirable in sport, such as those related to physical fitness, on everyday life.

2. In the light of obtained results, it is legitimate to introduce health education, also in sports-groups.

References


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