The level of anger experienced by the champions training judo measured by Spielberger’s Staxi-2 test

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Summary

Introduction. The aim of the thesis is to specify the level of trait, state and anger control measured by the Spielberger’s STAXI-2 test within the group of champions training judo and determine whether there are differences between sportsmen and control group (people who are not practising any sport) in terms of traits being tested.

Material and methods. The participants of research were 16 champions training judo at the age of 18-31 and the control group consisting of 35 students at the similar age who do not practice any sport. In order to obtain data on anger with the regard to champions training judo and the control group, Spielbergers STAXI-2 Self-assessment Questionnaire (part 1, 2, and 3) was applied to assess state, traits, expression and anger control.

Results and Conclusions. The level of anger within judo practitioners remains on low and moderate level; sportsmen are characterized by higher level of state and trait than persons who do not take up any sport. At the same time sportsmen cope better with emotion control and expression, which is probably (due to experience and training) the result of training the skill of handling strong emotions.

Introduction

The analysis of anger is definitely more common in sport; the results of aggressive behaviour or its consequences are very often discussed whereas feelings which trigger aggression are often omitted. Aggressive states are very frequently related to the feeling of anger. There are various forms of aggression in sport; mainly these are instrumental and hostile aggression. Hostile aggression is an aggressive behaviour provoked by the feeling of anger. Instrumental aggression is an aggressive behaviour directed to the obstacle which is between an aggressor and aim which he/she wants to achieve. What’s more, it is not triggered by anger as such [1,2]. Reviewing the psychological concept of anger, Spielberger, Ritterband and other authors [3] indicate significant incoherence and ambiguity of the following notions: anger, hostility and aggression. The authors also suggest the way to systematize the notions. They claim that although the above concepts are related to each other, they cannot be used interchangeably. They suggest to use the following term to define three phenomena: „AHA! Syndrome” (anger, hostility, aggression).

Spielberger [4] defines anger as an emotional state which involves different feelings in terms of intensity ranging from subtle annoyance, irritation to strong fury and rage. Hostility is related to frequent experiencing angry feeling, however itself it refers to the complex set of behaviours such as: malice, scorn, revengefulness, cynicism, which provoke aggressive attitude towards other people [5]. Whereas the concept of aggression refers to the states of destructive and penalizing nature directed towards other people or objects in the environment [6,7]. Anger is undoubtedly the core (nucleus) of AHA! Syndrome, however neither hostility nor aggression should be identified with anger. The basic difference between them is that anger is an emotion, hostility – an attitude and aggression – a behaviour [8].

The real problem is the lack of adequate methods to measure emotions of anger. Most frequently researchers use the R.B. Catell’s Questionnaires of personality, The Buss – Durke’s Inventory or the Z. Gas’s Inventory of Psychological Aggression Syndrome, which measure the level of aggression (behaviours), not of anger [9,10,11] Spielberger’s STAXI-2 test may be an alternative to the above tests.
The aim of the thesis is to specify the level of trait, state and anger control measured by the Spielberger’s STAXI-2 test within the group of champions training judo and determine whether there are differences between sportsmen and control group (people who are not practising any sport) in terms of traits being tested. Apparently, it may be assumed that the feeling of anger, especially its high level, is related to the aggressive behaviour of champions.

Material and methods

The participants of research were 16 champions training judo at the age of 18-31 and the control group consisting of 35 persons at the similar age who do not practice any sport.

In order to obtain data on anger with the regard to champions training judo and the control group, Spielberger STAXI-2 Self-assessment Questionnaire (part 1, 2, and 3) was applied to assess state, traits, expression and anger control. Moreover, Individual Card of Champion was used to collect basic data on a champion.

STAXI-2 Self-assessment Questionnaire is one of the tree methods created by Charles D. Spielberger [12] on the basis of common theoretical model. The remaining two methods are applied to test fear and depression.

Spielberger distinguishes two aspects of anger: anger as a state and anger as a trait. The first concept of anger (state anger) is defined as a psychobiological state consisting of feelings differentiated in terms of intensity ranging from subtle annoyance, irritation to strong fury and rage together with the stimulation of autonomic nervous system. State anger changes over time as the function of frustration, observed insult or injustice and physical experience or verbal attack. Whereas anger understood as a relatively permanent trait (trait anger) refers to individual differences in terms of frequency of experiencing angry feeling over time. In other words, it is a tendency to react with anger to different situations. The STAXI-2 questionnaire consists of 57 questions divided into three parts. The first part assesses the state of anger and comprises 15 questions. The second part tests anger understood as relatively permanent trait and includes 10 questions. The third part evaluates anger expressions and control, consists of 32 questions. The detailed structure of STAXI-2 scales and subscales is the following [13]:

1. **S-Ang** – the scale of state anger (15 items)
   - S-Ang/F – “feeling angry”
   - S-Ang/V – “feel like expressing anger verbally”
   - S-Ang/P – “feel like expressing anger physically”

2. **T-Ang** – the scale of trait anger (10 items)
   - T-Ang/T – angry temperament
   - T-Ang/R – angry reaction

3. **AX** – the scale of anger expression and control (32 items)
   - AX-O – anger expression-out
   - AX-I – anger expression-in
   - AC-O – anger control-out
   - AC-I – anger control-in
   - AX Index – general anger expression index.

In American research the internal compatibility of particular scales ranges from α=0.64 to α=0.94. The method has obtained the indexes of criteria accuracy which, in the opinion of authors, corresponds to their the theoretical assumptions.

The questionnaire used in the research has the status of experimental method. With the prior consent of the author it has been translated into Polish by M. Tetiurka and then compiled by P. Oleś and W. Bąk. Statistical analyses has been done on the log-transformed scores using (StatSoft version 10)

Results

The results scored at the STAXI-2 test by the champions training judo and the control group are presented in the tables 1 and pictures below.

Tab. 1. State, trait, anger control and expression are measured by STAXI-2 test in the group of champions training judo (n=16) and control group (n=36)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Judo (n=16)</th>
<th>Control group (n=36)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>χ</td>
<td>SD</td>
<td>R</td>
</tr>
<tr>
<td>S-Ang/F</td>
<td>7,26</td>
<td>2,08</td>
<td>5-19</td>
</tr>
<tr>
<td>S-An/V</td>
<td>6,12</td>
<td>2,26</td>
<td>5-19</td>
</tr>
<tr>
<td>S-Ang/P</td>
<td>6,72</td>
<td>2,08</td>
<td>5-18</td>
</tr>
<tr>
<td>S-ANG</td>
<td>21,10</td>
<td>6,32</td>
<td>15-52</td>
</tr>
<tr>
<td>T-Ang/T</td>
<td>7,80</td>
<td>1,14</td>
<td>4-12</td>
</tr>
<tr>
<td>T-Ang/R</td>
<td>7,12</td>
<td>1,36</td>
<td>4-12</td>
</tr>
<tr>
<td>T-ANG</td>
<td>18,68</td>
<td>3,51</td>
<td>10-30</td>
</tr>
<tr>
<td>AX/O</td>
<td>16,80</td>
<td>3,65</td>
<td>8-27</td>
</tr>
<tr>
<td>./AX/I</td>
<td>18,00</td>
<td>3,66</td>
<td>8-30</td>
</tr>
<tr>
<td>AC/O</td>
<td>23,17</td>
<td>4,42</td>
<td>8-31</td>
</tr>
<tr>
<td>AC/I</td>
<td>22,11</td>
<td>4,22</td>
<td>8-31</td>
</tr>
<tr>
<td>AX-INDEX</td>
<td>38,50</td>
<td>10,60</td>
<td>8-68</td>
</tr>
</tbody>
</table>

Judo practitioners had higher scores in the state scale (S-ANG=21.10) and trait (T-ANG=19.73) than the control group. However, sportsmen are better at coping with anger expression and control than persons who do not practise any sport.

Statistically significant differences between groups occurred in the two scales of the trait anger T-Ang anger: T-Ang / T - angry temperament and T-Ang / R - angry reaction.

Both sportsmen and control group presented low as well as moderate level of anger. Both groups presented low level in the all trait scale (S-Ang – the scale of state anger, S-Ang/F – „feeling angry”, S-Ang/V – “feel like expressing anger verbally) and trait scale too (S-Ang/P – “feel like expressing anger physically”, T-Ang – the scale of trait anger, T-Ang/T – angry temperament, T-Ang/R – angry reaction). Moderate level competitors of judo and control group presented in the scales of expression and control of anger (AX – the scale of anger expression and control, AX-O – anger expression-out, AX-I – anger expression-in, AC-O – anger control-out, AC-I – anger control-in, AX Index – general anger expression index).

The scores of STAXI-2 Self-assessment Questionnaire we can introduce on the profile.
Discussion

Research on aggression in sport can be done in four categories. The first category focuses on assessing the anger level in the group of sportsmen of different disciplines, second one attempts to demonstrate the role of aggression in sport fight – whether aggression is related to the sport success; third one seeks the answer whether sport generates aggression; fourth one analyzes the phenomenon of sport hooligans. Attention should be attracted to works on these issues by Karolczak–Biernacka [14], or Duńska [15].

Methods used in the research are virtually limited to Buss-Durkee Inventory and Cattel’s Personality Factor Questionnaire (distinct results may be scored although assessment is done with the mentioned tools in the same group of sportsmen). There is still shortage of methods which would allow to control also other variables influencing the level of aggression [16]. Significant number of research and articles on aggression can be found in the literature, however anger issues are rarely discussed. After all, anger is the emotion, which very often triggers aggression. From scientific and pragmatic point of view it is worth undertaking research which allows to assess not only the level of anger, its state, trait and ability to control it, but also its type and factors which give rise to it.

Why don’t we assess anger? Anger is not a bad emotion, it can be used properly; it gives a lot energy which is essential in sport fight and it does not have to lead to aggressive behaviour. Well-directed aggression may be helpful in achieving better sport results. The aim of the thesis is to assess state, trait, anger expression and control in the group of champions training judo measured by Spielberger’s Self-assessment Questionnaire STAXI-2 - with a new measurement tool which might be helpful in training and (mental) preparation of sportsman to fight. Unfortunately, sport gradually loses its creative and intrinsic values and it turns into instrumental ones. In the world full of aggression, sport was to soothe the traditions, it was the message of Olympic Games; such idea was included in the philosophy of Pierre de Coubertin.

Between the competitors of judo and the control group were statistically significant differences in the two scales of the trait anger T-Ang: T-Ang / T – angry temperament and T-Ang / R – angry reaction. Those differences may be result of judo practising. Probably the higher anger may be beneficial for judo contestants, causing more offensive and effective fight style. Similar studies conducted Mroczkowska, Kownacka, Obmiftski, comparing aggressiveness into three groups of competitors; practising traditional karate, wrestling and judo. In the group of competitors practising judo, the overall level of aggressiveness was higher as competitors of traditional karate and lower as compared to the wrestlers. For the most part, such differences stemmed from the contribution of two fundamental components of general aggressiveness, i.e. physical and verbal aggressiveness – as a manifestation of experiences involving negative emotions. The mean values of the measured parameters and general aggressiveness were found to be very similar for wrestling and judo on the average level [17].

Supinski compared the level of aggression of players handball and judo – slightly higher than the results obtained handball players, but at the level of the average [18]. In other studies Lamarre and Nosanchuk [19,20,21], Daniels and Thornton [22] argue that judo training reduces the aggression and confirmed that competitors of combat sports and martial arts [23,24] characterized mostly low level of aggression.

Nowadays, psychological researches involving new and more specific methods used in sports and martial arts are undertaken rarely [25-34]. Most researchers focus on the study of the behavior or some selected feature of the sportsman and the very helpful and valuable knowledge would be to know about emotions of contestants.

Conclusions

Generally, the level of anger within judo practitioners remains on low and moderate level; sportsmen are characterized by higher level of state and trait than persons who do not take up any sport. At the same time sportsmen cope better with emotion control and expression, which is probably (due to experience and training) the result of training the skill of handling strong emotions.

It is worth broadening the research on anger in the groups of sportsmen also of other sport disciplines and martial arts so that the relation of anger and aggressive behaviour could be more deeply analysed.

References


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