ATTITUDES OF FOOTBALLERS OF DIFFERENT SPORTS EXPERIENCE TO TRAINING MEANS OF RECOVERY

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Abstract
Training means of sportmen recovery are considered to be the means (exercises) of training that can be used equally for raising the level of training and the optimal recovery of sportmen. Various means and methods should be used in order to increase the efficiency of training means of recovery. The dosage and methods of their application should be changed, i.e., their application should always be complex, variable and specific, depending on sports and the structure of training process. The aim of the research consists of testing and analyzing the attitudes of footballers of different sports experience to training means of recovery. The sample of examinees consists of 120 footballers, of nine different league teams, from the area of the Football Association of Vojvodina, divided into two groups after their experience: I group (62) - 4-8 years of sport experience, II group (58) - 9 - 14 years of sports experience. The sample of variables constitutes a system of 10 items (statements), and each paragraph (statement) contains 5 verbal categories (indicated by -2 to +2). To determine the multivariate and univariate significance of differences between footballers of different sports experience, the multivariate analysis of variance (MANOVA) and the univariate analysis of variance (ANOVA) are applied. Generally, it can be concluded that the footballers of different sports experience differ and do not agree on the confirmation of the proposed items.

Key words: attitudes, sports experience, training means of recovery, footballers

Introduction
Training means of sportmen recovery are considered to be the means (exercises) of training that can be used equally for raising the level of training and the optimal recovery of sportmen. In order to use the training means of recovery more effectively, it is necessary to know well how they affect a sportman's body depending on the way and length of their application, where it is necessary to take into account the fact that the body gets used to appropriate recovery means just as well as it gets used to the load. Various means and methods should be used in order to increase the efficiency of the training means of recovery. The dosage and methods of their application should be changed, i.e., their application should always be complex, variable and specific, depending on sports and the structure of training process.

The aim of the research consists of testing and analyzing the attitudes of footballers of different sports experience to the training means of recovery. Athletes spend a much greater proportion of their time recovering than they do in training. Yet, much attention has been given to training with very little survey of recovery. Recovery can be categorized in three terms: I) immediate recovery between exertions; II) short-term recovery between repeats (e.g., between resistance sets or interval bouts); and III) training recovery between workouts. (Bishop et al., 2008). Previous researches on the application of recovery means have almost not even been published (on a satisfactory sample of respondents and with the correct application of methodological procedures).

For these reasons only the studies that are mainly related to the attitudes of sportmen regarding training process (which is the function of preparation system) and the training means of recovery can be used for comparison. Comparing attitudes towards sport (sportmen of different competition ranks and non-sportmen) it was found that the sportmen of lower competition rank had the highest value of general attitude towards sport, top-ranked sportmen had a slightly lower value, while non-sportmen had mostly positive general attitudes towards sport (Havelka et al., 1981). Researches on the attitudes of boxers towards psychological preparation showed that top boxers have negative and boxers of higher socio-cultural level have positive and that Yugoslav boxers still have different attitudes towards psychological preparation (Savić, 1984). Attitudes of young people towards sport morality have pointed to the fact that non-sportmen are of the opinion that sport has no special significance in their lives, while sportmen believe that sport is very important in their daily living activities (Krsmanović, 1987). The training means of recovery are considered essential, bearing in mind that they provide an efficient flow of the process of recovery at the expense of a well planned and conducted training. They are related to: volatility of rest intervals between each training and competition, applying various means and methods of training, variability and wave loads, changing conditions and places of training, the introduction of special days of rest and recovery cycles and rational organization of the optimal pace of life and training (Malacko et al., 2004).
Methods

The research sample consists of 120 footballers from nine different league clubs from the area of the Football Association of Vojvodina, which are divided into two groups on the basis of sports experience (the first group (62) - 4-8 years of sport experience, the second group (58) - 9 - 14 years of sports experience). The sample of variables makes a system of 10 items (statements), and each paragraph (statement) contains 5 verbal categories (indicated from -2 to +2). Paragraphs (statements) applied in the study are: 1. The recovery of sportsmen is not important in the training process. 2. For a sportsman during the training process, the training itself is more important than the recovery from the training. 3. During the training process, it is equally important to take into account the training and the recovery of sportsmen. 4. Only a well recovered body of a sportsman can endure constant and intensive training loads. 5. A well programmed and well conducted training session does not contribute sufficiently to the high preparation of sportsmen. 6. In addition to a well organized and conducted training session, sportsmen must be sure to take some additional stimulating resources. 7. During the day, it is sufficient that sportsmen get rest between two sessions lasting 4 to 6 hours. 8. During the day, it is sufficient that sportsmen get rest between two sessions lasting from 6 to 8 hours. 9. A good recovery for sportsmen is provided only under the condition that they practice once during the 24 hours. 10. The training recovery means of sportsmen are considered effective only if their training and mode of life are well conducted. To determine the multivariate and univariant significance of differences between footballers of different sports experience, the multivariate analysis of variance (MANOVA) and the univariant analysis of variance (ANOVA) are applied.

Results and discussion

Table 1. shows the frequencies of respondents’ answers to the questionnaire „Training means of recovery“. Based on the multivariate significance of difference between the two groups, formed in relation to the length of sports experience (Table 2) it is noticeable that there is a statistically significant difference (Table 2). Based on the univariant analysis (Table 3) it is noticeable that there are statistically significant differences only in statements 9 and 10, which proves that footballers of different sports experience usually have a unanimous attitude to the training means of recovery and that the attitudes (except the aforementioned two) are not dependent on sports experience longer than four years (Table 3). Concerning the analysis of the obtained data (Table 3) it is noticeable that statements 6, 9 and 10 contributed to the greatest discrimination between the two groups, differing in sports experience. Different frequency of claims between the two groups was related to the stimulating resources in training.

And that a good training is ensured if one trains only once during the 24 hours and that the training means of recovery are effective only if training and mode of life are well conducted. Based on the Pearson contingency coefficient (Table 3) it is noticed that the correlations of attitudes with sports experience are substantially low and that the correlation is highest with statement 9. All this leads to the assumption that the increase of sports experience sportmen change their attitude to the duration of recovery as well as the mode of recovery, that is, the mode of life between two training sessions. Footballers with longer sports experience have a more positive attitude to this issue. Looking at the group centroids (Table 4) it is clearly recognizable that the other group with longer sports experience (9-14 years) confirmed the proposed statements (positive sign) to a greater extent, which can be attributed to an important maturity, being better informed and the knowledge of training process when it comes to the training means of recovery. Confirmation that the above mentioned specificity of the groups actually corresponds to these groups, and how homogeneous in these specifics each group is (Table 5), can be obtained on the basis of homogeneity of each group (see Table 5).
Comparing the results with the model of the training means of recovery, we can clearly conclude that footballers of different sports experience treat training and recovery from training equally, that is, they argue that the training process is effective then, when it is in compliance with the mode of life without intake of stimulating resources. The attitudes of footballers obtained in this way allow an exceptional basis for the implementation of more intensive recovery ways by the means of training, where the role and expertise of a coach in the modeling of the entire training process is the most important. There are few studies about the attitudes of football players to training means of recovery. Previous researches are reduced mainly to the attitudes to wearing protective equipment during a football game (Braham et al., 2004; Finch et al., 2003), the regulation of body mass (Baer et al., 1994), as well as fair play, which is not a highly appreciated attitude (Junge et al., 2000). The practical value of the research is in the fact that the footballers confirmed, by their attitudes, that they find the rest of 6-8 hours between two sessions a day sufficient, if the training sessions are less intensive.

### Table 4. Centroids and borders between footballers of different sports experience in the system of attitudes to "the training means of recovery"

<table>
<thead>
<tr>
<th>Groups</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centroids</td>
<td>-.764</td>
<td>.817</td>
</tr>
<tr>
<td>Borders</td>
<td>.026</td>
<td></td>
</tr>
</tbody>
</table>

### Table 5. Homogeneity between footballers of different sports experience in the system of attitudes to "the training means of recovery"

<table>
<thead>
<tr>
<th>Groups</th>
<th>Representation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>47/62</td>
<td>75.806</td>
</tr>
<tr>
<td>II</td>
<td>27/58</td>
<td>46.552</td>
</tr>
</tbody>
</table>

### Conclusion

In general terms it can be concluded that the footballers of various sports experience differ and are not unanimous in their approval of the proposed statements, which also occurred in some of the earlier researches (Smajić et al., 2009, Smajić et al., 2009).

### Literature


STAZOVI NOGOMETAŠA RAZLIČITOG SPORTSKOG ISKUSTVA O TRENAŽNIM SREDSTVIMA OPORAVKA

Sažetak
Trenažna sredstva sportskog oporavka su raspravljena kao sredstva (vježba) treninga koje se mogu ravnopravno koristiti za povećanje razine treninga ali i za optimalni oporavak. Različita sredstva i metode mogu se koristiti s ciljem povećanja učinkovitosti trenažnih sredstava oporavka. Doziranje i metode primjene treba mijenjati, tj., njihova primjena je uvijek složena, varijabilna i specifična, te ovisi o sportu i strukturi trenažnog procesa. Ovo istraživanje uključivalo je testiranje i analizu stavova nogometaša različitog sportskog iskustva o trenažnim sredstvima oporavka. Uzorak ispitanika bio je 120 nogometaša, iz devet različitih momčadi, s područja Nogometnog Saveza Vojvodine, podijeljenih u dvije skupine sukladno iskustvu: I skupina /62/ 4-8 godina sportskog iskustva, II skupina /58/ 9-14 godina sportskog iskustva. Uzorak varijabli predstavljao je sustav od 10 čestica (tvrdnji), a svaka tvrdnja sadržavala je 5 verbalnih kategorija (označenih od -2 do +2). Za utvrđivanje univarijantnog i multivarijantne značajnosti razlika između nogometaša različitog sportskog iskustva, primjenjena je multivarijantna analiza varijance (MANOVA) i univarijantna analiza varijance (ANOVA). Općenito se može zaključiti da se nogometaši različitog sportskog iskustva razlikuju i ne slažu u potvrđi predloženih tvrdnji.

Ključne riječi: stavovi, sportsko iskustvo, trenažna sredstva oporavka, nogometaši

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