The profile of the emotional-affective state of the middle and long distance running athletes during the competition

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Abstract

The aim of the present paper is to determine the affective-emotional profile of the athletes specialized in middle and long distance run. Methods: POMS test that analyzes current life circumstances and changes into sensitive subject’s level. The results reveal values below the limit of 50 points in two of the six variables (D-D and O-I). Variable C-C (Code C) presents a score of 50.78, which shows a slight confusion before the competition’s start. Analysis and processing data from the application POMS, show that the state before an important competition has changed, meaning increasing affective-emotional states of athletes.

Keywords: sport performance, emotional-affective state, competition, middle distance run, long distance run;

1. Introduction

Sport performance in running viewed as a planned result is obtained according to the specialists in the sport field, by the superior adaptation of the requirements imposed by the environment. Some of these environment requirements are represented by training and competition, requirements which can be seen as stress factors. Obtaining the planned result (in our case sport performance in the athletic events) takes place in specific conditions such as those which appear in competitions.

The improvement of results at world level in the athletic sports of long and middle distance running have determined, in our opinion a higher engagement from the biological and psychic point of view for obtaining performance which would ensure their participation in the aimed competitions. This engagement has supposed a higher mobilization from the energetic and psychic point of view, being a powerful factor of physiologic and psychic stress which the athletes must deal with.

We consider that only by knowing the reactions to stress in a certain moment is not sufficient and relevant; it is also necessary to know other variables which control and orient the behaviour and the athletes’ reactions. From these variables we highlight those of psychic nature which can contribute to the stimulation or limitation of sport performance in athletic competitions and can have an unfavorable impact on the competitional potential of athletes: the athlete’s personality, his emotions, anxiety, the relation coach-athlete, emulation, fear, etc.

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In the opinion of M. Golu (2000), the emotions represent „the concordance or discordance report between the dynamics of internal events (own motivation states) and the dynamics of external events (situations, objects, persons around you)“. This report can generate, according to the literature of general psychology, activation and positive emotional experience (consonance) and negative experience (disonance), reflecting in the opinion of P. Popescu-Neveanu (1977), the relations between the subject and ambience. The emotions represent an essential guiding mark in the system of human personality, the emotional processes being influenced by the significance that a person gives to the different experiences he/she is involved in.” (Crețu, T., 2003).

In sport competitions, according to the proposed objectives, the involvement of athletes is characterised by limit psychic states („subjective manifestations on a large tension background, provoked by especially difficult situations in which the athlete finds himself/herself“ (Epuran, M., Holdevici, I., Tonitza, F., 2001). These states determine some specific behaviours which also have some emotional functions, manifested either by enthusiasm, self-trust, fear of competition, fear of the opponent, apathy, anger, excessive introversion, lack of communication, bad mood, etc. According to the particularities of the athletes’ personality and their sport experience and especially their competition experience according to their level of preparation, the start mood (as emotional state) can change during the competition period, sometimes even several times during the same competition, increasing or diminishing the intensity of emotions at different levels. Each athlete has his/her own way of relating, reacting and controlling emotions. This is the reason why, the standard approaches regarding the control of emotions in sport should be replaced according to Y. L. Hanin (1999), with individualised clinical and quantitative approaches centred on the athlete and on his/her subjective experience. The mentioned author proposes a classification of emotions in 4 categories: pleasant and facilitating emotions (P+), unpleasant and facilitating emotions (N+), pleasant and destabilizing emotions (P-), unpleasant and destabilizing emotions (N-). So emotions in sport are positive (P), negative (N), facilitating (+) and destabilizing (-). In relation to the specific of the analysed theme, we can state that the athlete who aspires to a superior performance in a middle/long distance running can be characterised by: a balanced personality; an increased energetic potential; a very good resistance to frustration (as well as, in our opinion, tolerance to stress); a high emotional stability (with adaptation complex possibilities to changing situations in the pre-competition and competition periods – emotional intelligence). Thus, the athletes can be both extrovert and introvert. Due to the character of the effort, of affective and psychic involvement bigger than in the case of a person who does not practice a sport/sport test at performance level, due to socialization and interrelations which are achieved studies and researches (F. W. Warburton, J. E. Kane, 1966) have highlighted the fact that in the conditions of sport competition, objectively considered, even the athletes of international value present tendencies towards introversion. This aspect was considered by the mentioned athletes as being due to the competition stress.

2. Organization of the research

The actions of stress factors on athletes can be diminished or even cancelled, in our opinion, if the athlete anticipates them, he/she becomes aware of them and „meets” them with self-adjustment mechanisms.

2.1. Scope

The main purpose of our research was to highlight the momentary emotional affective states of the participant in the National Championship of Seniors and Youth – Crystal Cup, an important competition, having an important objective.

2.2. Subjects

The subjects of research were 9 performance athletes specialised in middle-long distance running (6 boys and 3 girls) with an average age of 22.67 years (the minimal age 19 years, the maximal age 26 years), having an experience in practicing the athletic sports in between 5 and 14 years and a specialization in the middle-long
distance running of minimum 4 years. The sport performances of subjects are from good (with medals at national level) to very good (multiple national and Balkanik champions, with medals at different editions of the Europe’s Cup, finalists in the World Championships and European Championships of juniors and youth).

2.3. Methods

For the achievement of the present research, we have applied the following methods: documentation method, observation method, conversation method, the method of the questionnaire inquiry, the statistic method. The main instrument of research for this paper was the P.O.M.S. test (the profile of spirits) which analyses the situations in the current life of subjects and the sensitive changes which appear.

2.3.1. Description and development

The P.O.M.S test was applied in the National Championship of Seniors and Youth – The Crystal Cup, developed in Bucharest, 2011, having in view to highlight the following psychic variables: tension-anxiety (T-A, code T) – variable highlighted by the adjectives which describe an increased somatic tension (“tension”, “on the edge”) as well as some observable psycho-motoric manifestations (“poor/fragile”, “apprehensive”). The adjectives which refer to an anxiety and diffuse state are anxious, embarrassed/awkward; depression/melancholy (D-D, code D) represents a depressive dispositional state accompanied by a feeling of discrepancy, being described by scales which indicate feelings referring to the lack of personal value, usefulness regarding the attempt to adapt (“unworthy, without hope, desperate”), a feeling of emotional isolation from others (sad, lonely, helpless, miserable), anger (angry, unhappy) and guilt (guilty, sad for what he has done); anger-hostility (S-O, code A) – variable which expresses either a disposition of anger and antipathy towards other persons (“angry, mad, ready to fight”), either feelings of intense and visible anger (“petulant”, “irate”), or easier/reduced feelings of hostility (“outraged”, “invidious”) etc; vigour-activity (V-A, code V) – variable defined by adjectives which suggest an emotional disposition of vigour, efervescence and an increased level of energy; tiredness –inertion (O-I, code F) – variable which highlights a state of tiredness, inertia and a reduced level of energy; confusion-consternation (C-C, code C) variable characterised by disorientation and confusion in thinking. According to psychologists, it can represent a criterion of cognitive efficiency, possible a product of the anxiety state or other similar states.

On the basis of indications, the scores obtained were transferred on the profile card which contains „T” scores for each factor. The graphic representation of data highlights the graphics "iceberg" type considering the visible part of it as being assigned by a line placed at the level of 50 points.

3. Results

The obtained results (points) in the 6 variables in T scores (table 1) according to the profile chart and taking into account the limit imposed by the value 50 (guiding mark), the application of the POMS test has highlighted the following:

- the analysis of the average highlights values under the limit of 50 points in two of the 6 variables: D-D (43,89) and O-I (45,33). This aspect indicates the fact that in the testing moment in average the subjects were neither tired nor in a depressive dispositional state, being characterised by an optimal feeling of personal value – table 1, figure 1;
- the analysis of individual values at variable O-I (code F) in table 1 highlights the existence of two T scores over the guiding mark value (50) in he case of subjects S.A. (54) and V.C. (55), a fact which confirms a slight state of tiredness and lack of energy. In this case, we consider as a cause a large volume of work of the subject S. A (in his desire to run also in the room season, he approahed for the analysed competition a shorter test – 1500 m as compared to the specialised test -10.000m, for which he prepared himself and which do not take place in the competitions on the covered course) and an unsufficient adaptation to the conditions of competition in subject V. C (back from a cantonnement achieved abroad);
the determination of the standard variation (S) and the variability coefficient (Cv) highlights an increased degree of homogenity of the values registered by the subject, little dispersion of data; the arithmetical average is representative in our case;

- the amplitude from the statistical point of view highlights some valid values for the standard variation – table 1;

**Table 1. The analysis of T scores obtained by the subjects in the POMS test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>T-A (code T)</th>
<th>D-D (code D)</th>
<th>S-O (code A)</th>
<th>V-A (code V)</th>
<th>O-I (code F)</th>
<th>C-C (code C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.I.</td>
<td>M</td>
<td>47</td>
<td>42</td>
<td>47</td>
<td>51</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>S.A.</td>
<td>M</td>
<td>63</td>
<td>48</td>
<td>64</td>
<td>52</td>
<td>54</td>
<td>55</td>
</tr>
<tr>
<td>F.C.</td>
<td>F</td>
<td>52</td>
<td>44</td>
<td>54</td>
<td>63</td>
<td>41</td>
<td>52</td>
</tr>
<tr>
<td>I.C.</td>
<td>M</td>
<td>51</td>
<td>41</td>
<td>62</td>
<td>55</td>
<td>45</td>
<td>44</td>
</tr>
<tr>
<td>B.C.</td>
<td>F</td>
<td>55</td>
<td>45</td>
<td>70</td>
<td>60</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>C.V.</td>
<td>M</td>
<td>55</td>
<td>39</td>
<td>51</td>
<td>57</td>
<td>41</td>
<td>39</td>
</tr>
<tr>
<td>B.A.</td>
<td>F</td>
<td>55</td>
<td>40</td>
<td>64</td>
<td>63</td>
<td>43</td>
<td>53</td>
</tr>
<tr>
<td>V.C.</td>
<td>M</td>
<td>65</td>
<td>50</td>
<td>80</td>
<td>65</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>G.A.</td>
<td>M</td>
<td>63</td>
<td>46</td>
<td>68</td>
<td>65</td>
<td>49</td>
<td>59</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td>56,22</td>
<td>43,89</td>
<td>62,22</td>
<td>59,00</td>
<td>45,33</td>
<td>50,78</td>
</tr>
<tr>
<td><strong>min</strong></td>
<td></td>
<td>47</td>
<td>39</td>
<td>47</td>
<td>51</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td><strong>max</strong></td>
<td></td>
<td>65</td>
<td>50</td>
<td>80</td>
<td>65</td>
<td>55</td>
<td>59</td>
</tr>
<tr>
<td><strong>S</strong></td>
<td></td>
<td>6,16</td>
<td>3,72</td>
<td>10,26</td>
<td>5,45</td>
<td>5,94</td>
<td>6,08</td>
</tr>
<tr>
<td><strong>Cv</strong></td>
<td></td>
<td>10,96</td>
<td>8,48</td>
<td>16,48</td>
<td>9,24</td>
<td>13,10</td>
<td>11,97</td>
</tr>
<tr>
<td><strong>Ampl</strong></td>
<td></td>
<td>18</td>
<td>11</td>
<td>33</td>
<td>14</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>

**Figure 1. The average of the values obtained by the subjects**

**Figure 2. The values registered by the subjects Tension-Anxiety (T-A, code T)**
Grigore Vasilica et al. / Procedia - Social and Behavioral Sciences 84 (2013) 1269 – 1274

1273

1273

figure 2 shows the fact that the „iceberg” profile specific for the POMS test, highlights some superior values for the variable S-O (code A, the hostility dispositions, anger and states of „ready to fight”) and for variable V-A (code V, increased emotional mood); the analysis of the variable S-O (code A), highlights the following aspects: with the exception of subject G.I, all the other 8 subjects have obtained some individual scores over the guiding mark value 50, a fact which has determined the orientation of the „iceberg” profile towards that variable highlighting states of hostility-anger-irritation before the start of the competition; the highest value was registered by the V.C subject, score 80, a fact which indicates an increased level of anger, hostility, discontentment, raging which we consider to be the result of inadaptation adequate to the specific conditions following his homecoming after the preparation abroad;

- the analysis of individual values of the subjects, reported to the criterion „gender”: masculine/feminine (figure 3 and 4) show that from the 9 subjects, 6 have an „iceberg” profile predominant over the variable S-O (code A, 4 subjects of masculine gender, 2 subjects of feminine gender) and 3 have an „iceberg” profile predominant over variable V-A (code V, 2 subjects of masculine gender and 1 subject of feminine gender);
- the analysis of the variable C-C (code C) with score of 50,78 highlights an easy state of confusion before the beginning of the competition which represents, according to psychologists a criterion of cognitive efficiency, possible a product of the anxiety state or some similar states. From the values presented before (table 1) we observe this aspect in 5 out of 9 subjects, reaching an increased vaue for subject G.A.;
- the analysis of individual values of variable V-A (code V) reveals the fact that all the subjects have surpassed the guiding mark value of 50 (table no. 1); 2 subjects of masculine gender and 2 subjects of feminine gender have high values (63 and respectively 65) indicating a high level of activation, of vigour before the competition;
- The values registered in the variable tension-anxiety (T-A, figure 1) reveals that 8 subjects (exception the first subject, G. I.) have obtained individual scores over the guiding mark value 50, highlighting some states of anxiety, apprehension, tension before the beginning of the competition; the highest value was registered by the subject V. C. – score 65, followed by S.A. and G.A., each with a score of 63.

4. Conclusions

From the synthesis of the presented data, we observe that the most intense psychic states are those which correspond to tension-anxiety (T-A, code T), anger-hostility (S-O, code A) and vigour-activation (V-A, code V); the most obvious intensifications of the affective-emotional stats are present for the subjects S.A. and V.C. (figure 1). The analysis and processing of data following the application of the POMS test, reveals that the stress before an important competition has modified in the sense of intensifying the affective-emotional states of athletes, almost 60% of the analysed individual scores (59,26% representing 32 values).

References


