INTERRELATIONS BETWEEN THE PSYCHIC AND PHYSICAL CHARACTERISTICS OF MENTALLY DISABLED SPORTSMEN

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Abstract

Special Sport Olympics România is a non-governamental organization which wants to make a scholar, social and profesional integration by sport of the children with disabilities. This results could be obtain by developing the physic and physical particularities at children with special needs (such as: their health, cognitive, emotional and volitive processes, their entire personality). The most important cathegory of childrens which is adressed Special Sport Olympics România is represented by mental deficiency and the sport which is the most frequent pratices is athletism. In this study, the principal aims are to identify the factors which transform a mental disorder child into a very good sportman, the way in which sport can improve the quality of life for these persons and the most effective curriculum for scholar of the pupils with menthal disability. The research took place in 2008, at local and national leg of Special Sport Olympics România’s competition and the used method are observation, applying scale and questionary of personality and IQ tests. The results which are obtained prove that pupils which practice sport are more sociable, comunicative, have superior scholar results and they can integrate themselves in the society much better.

Key words: mental deficiency, Special Sport Olympics, inclusion, therapy, curriculum.

General Features of Children with Mental Deficiency

The American Association of Mental Deficiency (A.A.M.D.) defines mental deficiency through 3 criterias:
1. the mental deficiency setles in developing period of nervous system;
2. the I.Q has an inferior value on an average;
3. the adaptation behavoir is inadequate.

In this case, the mental deficiency represents an global insuficiency and an inferior function on an average which is manifested through a stagnation, a slowness or a short acquisitions in developing determined by biological and / or psychological etiology factors which action from the birth moment till the maturity ends and they have unfourable consequences in the adaptative behavior (Drutu I, 1995).

The diagnostic of mental deficiency is done through 3 perspectives: biological one, psychological one and social one. The most frequent known, indicator in the diagnosis and classification of mental deficiency is the intelligence quotient (I.Q.). Its value is offered by the ration between the real performance of the subject (expressed in mental age – M.A.) and the aspected performance knowing the chronological age (C.A). In Romania, if the person is diagnosticated with an I.Q less than 80, it says that the person is a mental deficiency.
In other terms, the mental deficiency can be classified in (Blandul V, 2007):

- **liminal intellect** – I.Q is between 70 and 79;
- **light mental deficiency** - I.Q is between 50 and 69;
- **moderate mental deficiency** - I.Q is between 20 and 49;
- **profound mental deficiency** – I.Q is less than 20.

The efficiency of mental disabled persons therapy depends on the precocity and validity diagnosis, the degree and type of mental deficiency, the socio-economical and cultural condition of reability and the adaptive and compensational potential of the child.

**Psychic and Physical Features of Sportsmen with Mental Deficiency**

Special Olympics is based on the conviction that by receiving an adequate training and support the persons with special intellectual needs can obtain success in individual or team sports (athletics, football, basketball) provided they are adapted to their limits. The aim of these Olympics is to help the persons with special educational needs to gain a benefit in physical, psychic and social field, strengthen their relations with the others in a climate of equality, respect and mutual acceptance. This idea corresponds to the integrationist theory, which says that every person, regardless of his/her disabilities, should be given the chance to assert him/herself and for the society he belongs to the possibility to get to know and appreciate them at their right value.

Special Olympics are organised for persons with inferior intellect who are at least 8 years old. They are divided into different age categories. As in Romania there are few studies that deal with the psychophysical particularities of mentally disabled sportsmen, we intend, as a first step, to synthesize the most important characteristics that may be attributed to this category of sportsmen (Epuran M, 1980).

The mentally disabled sportsmen have difficulties concerning the space-time orientation; the profoundness of perception is altered as well as the analyzing and synthesizing capacity, just as the duration and the volume of the perceptive act. Gaining a tactical advantage over the opponent is hampered by a less creative mind, characterized by the slowness of the intellectual operations and by the difficulty of integrating the new information in the prior cognitive systems. Sometimes we also notice inadvertence in the course of motile activities and its qualities (speed, precision, muscular contraction and relaxation) – that are recoverable through training (Davido R, 1998). The objective and subjective obstacles are a serious burden upon will-power because of the difficulties faced in establishing the goals and the ways of achieving them, because of the weak mobilization of attention and of the affective processes, because of the occurrence of negativism, the affective immaturity having a disorganizing role upon the entire psychic activity. However, in case the personality features (perseverance, sociability, effort making capacity, etc.) are properly developed, they may contribute to the sport performances (Drillien C., Drummond M. 1983).

**Objectives**

These theoretical considerations are confirmed by practice. The coaches noticed that while at certain competitions some sportsmen suffer a psychic and physical decline, others show an improvement of the same characteristics, which they can not explain (Epuron M, 1980). Therefore, in the present paper (which continues a precedent one), we have the following aims:

- to discover which are the most important factors that make a mentally deficient a champion;
- to explain the “declines” and “growth” of the mentally disabled sportmen between a different competitions;
- to analyse which is the most efficient curriculum for the recovering and social integration of these persons.
Methodology of Research

The lot of subjects

The lot of subjects for this research was composed from 30 pupils with mental disorders who were selected from those who attend special learning institutions from Oradea, Romania in primary and secondary cycles. The lot of subjects had 18 boys and 12 girls, 8-14 years old. Their intellectual level (I.Q.) was less than 80 (31% – liminar I.Q, 57% – light mental deficiency, 12% – moderate mental deficiency), which included them in mentally disabled category of persons in a different grades.

The stages of research

In order to achieve these objectives, the present research has known three phases. In the first one – done on the local stage of the Athletics Special Sports Olympics (Oradea, May 2008) – we intended to understand the elements that characterize the start disposition so that the possible effects of negative emotional reactions could be improved. In the second, we focused on the connections that might be established between the sport performances, on the one hand, and the intellectual level on the other hand; we also studied the personality profile characterizing the mentally deficient sportsman. In the last phase – performed on the occasion of the national stage of the Athletics Special Sports Olympics (Bucharest, October 2008) – we studied the possible changes of the affective disposition of the sportsmen compared with local stages.

The instruments

The technical literature considers that the psychic disposition of the sportsmen before the start of the competition comprises 3 main stages: the start fever, the start apathy and the preparation for fight. Out of the three, the first two ones (particularly the start apathy) may have a disorganizing role upon the sportsman’s emotional state of mind. In order to determine the presence and the intensity of this reaction with the mentally deficient children, before the start the Evaluation Scale of Anxiety as a state of being and as a feature was applied to 30 subjects. The interpretation of the results is made taking into consideration the person’s sex. Thus, while with girls the anxiety level at the beginning of the competition is superior to the level typical for these people; with boys the two values are approximately equal in respect of intensity. This means that the girls are more involved emotionally in the competition, but, in their case, the anxious reactions before the start had a motivational value. The anxiety, the tension, the biosomatic modifications or the psychomotor excitement helped the competitors to step on the podium. With the boys, the reactions that characterize the start disposition can be considered neither mobilizing, nor having a contrary effect since the anxiety levels have average values. The conclusion is that a high emotional level cannot be made responsible altogether for obtaining a sport performance. An adequate physical training and the creation of a motivational optimum by making the competitors aware of the importance of the competition and by getting them to focus on it may lead to superior results.

During the second phase, we aimed at establishing the intellectual level and the main character features of the children who had the best results at this stage of the contest. In order to do that we applied, the Raven Standard Progressive Matrix, the Eysenck Personality Questionnaire and the Tree Test to 30 people.
Results of Research

One first observation would be that it is hard to establish a correlation between the I.Q. and the sport performance. This means that the level of intellectual development does not influence significantly the success in sport, the tactical thinking in athletics with this category of sportsmen having a less important role. However, trainers should not neglect this aspect and they should know those moments when they have to intervene and encourage their sportsmen.

As far as the personality is concerned, the psychological portrait of the mentally disabled sportsman with good results would include them into the choleric category as their psychic manifestations assume a great capacity to open towards their environment (pictures 1, in which 1 – choleric, 2 – sanguinic, 3 – phlegmatic, 4 – melancholic). This capacity shows itself in the numerous social contacts (even if they are only superficial, sometimes), in the need for new and various relationships, in good mood and vivacity (sometimes reaching even exuberance), in the need for success, for attracting people’s attention and being appreciated by them, and, consequently, the immediate desire to win, a high spirit of competitiveness, so on.

![Figure 1. Different types of temperament for sportsmen pupils.](image)

We carried out the third phase of the study during the national stage of the Athletics Special Sports Olympics (Bucharest, October 2008). As this competition was much more important than the local one, we expected that the emotional involvement at the start would be much higher. In order to analyze the anxiety level and to compare it with the one identified during the local stages, we applied again The Anxiety Evaluation Scale with its two forms.

The results were statistically worked up and they appear in the following table:

<table>
<thead>
<tr>
<th></th>
<th>ANXIETY – STATE OF BEING</th>
<th>ANXIETY – FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>p</td>
</tr>
<tr>
<td>BOYS</td>
<td>0.38</td>
<td>p=0.02</td>
</tr>
<tr>
<td>GIRLS</td>
<td>0.36</td>
<td>p=0.02</td>
</tr>
</tbody>
</table>

$r =$ correlation coefficient Bravais-Pearson, $p =$ level of significance

The values show that with both boys and girls the emotional charge can sometimes well exceed their psychic capacity. This reaction may generate an affective shock with some sportsmen and this leads to failure in certain sports in which they would not face any difficulties in other circumstances (they encounter most problems in relay race and in long jump where they fail the start or are unable to concentrate on the jump). The emotional chaos may hamper these children in doing well during the competition.
Discussion and Recommendations

The emotional immaturity is the main feature of the affective life with sportsmen who have special intellectual needs. This immaturity shows itself in a weak self-control capacity and resistance to frustration, which explains the physical and psychic failures of some sportsmen in the competitions with higher stakes. The need for success deriving from egocentrism - that is an expression of emotional immaturity - make these children refuse the alternative of the second place and become disinterested when they see that somebody outruns them. Their impressionability and emotional labiality can have a negative influence upon the performance of the whole team. The uncertainty and superficiality during various stages of the competition can lead to poor results in the case of some sportsmen who were expected to perform well. On the contrary, other children who are not that much influenced by their emotional moods may obtain better results than it has been expected. The poor sense of reality is another problem of the persons with intellectual deficiencies. It shows itself in their incapacity to become aware of the importance of various competitions. They are unable to adjust themselves to new conditions and to mobilize themselves in order to overcome the objective and subjective obstacles they face. We should take into consideration possible psychic conflicts and traumas experienced in the first childhood that may lead to a sense of inferiority towards the other competitors; in case this feeling is too strong, it may have negative effects.

Obviously, such manifestations are only possible, not compulsory in the last stages of Athletics Special Sports Olympics, where the stake and the emotional charge are higher. Because of that, it is necessary not only a thorough physical and tactical training of the sportsmen, but also a psychic one. The experts say that to this later one at least as much as half of the time allotted to the physical training and tactical preparation should be allocated as well. For this reason, we suggest a personal curriculum for the sportsmen with intellectual problems, curriculum that should include the following aspects.

First of all, it is imperative to maintain an optimal physical and psychic tonus over the whole year. The professional studies (Epuran 1980, Drilien and Drummond, 1983) show that the children between the ages of 8 to 14 years develop different technical and sports abilities, the body scheme, the speed, the strength, the precision of the movements, the coordination, the sociability, the communication etc. We consider that the most efficient ways to improve these abilities are the sports games and the recreational activities as they can contribute to the complex exercise of the movements, to the environment’s cognition, to the development of the physical and psychic tonus; the games have a particularly important educational and therapeutic value. In this respect, we will focus on games that develop the abilities (for instance: motion games, games that develop the body scheme, the space-time orientation, etc.), games that improve the attention (various games with new and interesting stimuli), games for the development of the willpower (games that increase the resistance to tiredness), motivation games (becoming aware of the importance of the sporting activities’ and objectives). These “stimuli” should be applied before, during and, obviously, after the competition. During the pre-competitive period, the sportsmen should be familiarized with their opponents and their performances, as well as with the atmosphere of the competition. The playing in and the motivation for the start will be done in the small community of the team, taking into account the sportsmen’s above-mentioned particularities. As they are very impressionable, after a first contact with the stadium and the competition’s conditions, it is recommendable that the playing in of the children takes place elsewhere, taking as a model the team’s sociometrical leader. Through individual discussions, the coach will make them aware of the importance of the participation rather than that of the results. More than ever, the verbal boost and encouragement are imperative during the competition. In the case of those sports that require a constant effort (particularly at races) it is advisable that they have supporters at the start, at 60-70% of the track, which is a critical moment of the race, and then at 5-10% before the finish, for the final ‘assault’. The role of these supporters is to indicate the mentally disabled sportsman his position in the race and towards the other competitors, as long as he has difficulties in perceiving these tactical
elements. In the case of those sports that have more trials (long jump, putting the shot), the first trial and the order of taking part in the contest are very important – the verbal encouragement is less helpful. A very important aspect is the maintenance of the physical and psychic tonus after the competition is over. For these children it is recommendable the return to the psychotherapy of support by recreational games and activities mentioned before. The specialists do not recommend other forms of more complex psychotherapy, as long as sport has only a non-professional character for the persons with special needs, having as solely goal a better social-professional integration of these people.

Conclusions

First conclusion is about pupils’ with mental deficiency type of temperament. In this study, we proved that frequent type of temperament for sportmen pupils is choleric one and, after that, sanguinic one. That means they are very “open” persons, they have a great capacity to establish new and various interpersonal contacts with others, usually they have a good mood and vivacity, they are ready to accept new challenges and to involve themselves in different activities.

The second conclusion is about the emotional state of sportmen pupils with mental disorders. The results of our research shows that, even if sportmen with mentally problems are very enthusiastic and prepared to win, they are very unstable from emotional point of view, wich means that they have a lot of difficulties to finish an started action, to establish an rational objectives and to follow them till the end, to focused on their activity and so on. Therefore, is very important for coaches to encourage their sportmen and to offer them an affective support to obtain the best results they can in their sport area and, generally, in their life.

Finally, the therapy for sportmen with mental problems is the same like all others children with the same disability: a medical specality and sustenable therapy, education by mouvement, speech therapy, behavioral one, adequate vocational orientation so on (Blandul V, 2007). Therefore, the sport represents one of the most relevant way in which we consider that the children with mental deficiency could be effective integrate in the society in which they live.

References


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