

# STUDY ON THE LEVEL OF CREATIVITY FOR THE FEMALE HANDBALL PLAYERS (SENIORS)

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**Abstract:** *This paper is a study ascertaining rough the level of creativity that has been evaluated in a group of handball players (seniors-women). It has applied a battery of psychological tests to a group of 40 handball players.*

*The research subjects were aged between 18-27 years and they completed a battery of psychological tests only once. The instruments used in evaluation were some nonspecific for sport activities. Although exact measurement issues that concern creativity it is quite difficult, I focused the investigation on issues that actually condition the process.*

*The research results revealed that athletes have a high enough level in terms of creativity which has some meanings reported in the specifics of this sport.*

**Key words:** *creativity, handball players, evaluation.*

## 1. Introduction

The concept of creativity was stated from a psychological perspective by G. W. Allport in order to signify one of the sides of the system of the personality. In his vision, creativity dimension included a set of specific characteristics of each individual, everyone having a creative potential capable of evolving and being updated [6], [9].

The general meaning of the term creativity aimed to the capacity to produce something new, original, also it requires talent towards a higher level of individual facilities. Popescu N, P, Zlate M., and T. Cretu, indicates that in psychology, this concept has three distinct meanings:

a. "a. behavioral and creative mental activity;

b. the structure of personality or creative style;

c. creativity group where interaction and communication intercede generating new ideas " [7, p.178].

Physical education and sport performance represent two complex processes which there are instructive and educational and through them it is intended to achieve general and specific goals [4, 5], [8]. In this regard, it is acting on the individual on several levels: morphological, functional, motor and mentally. Referring to the psychological dimension, one that it can say it is a very interesting area of study in athletic performance because adequate training in this direction is often the key to sports [1].

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In the field of sports, creativity has been analyzed by several authors in different studies, as follows:

- D. Memmert and K. Roth [2] examined the effectiveness of different approaches to training in order to develop tactical creativity in team sports with the ball. They studied 135 children aged 7 who were divided into two categories of groups: one that was used approach non-specific and another where they used a specific approach to games: handball, football and hockey. The two authors concluded that subjects that have formed non-specific groups they obtained improvement in the general creativity, and those of specific groups, showed better results in creative direction of the sport that they have practiced. Also, the approach nonspecific looming as an alternative for the specific traditional approaches;

- D. Memmert, J. Baker, C. Bertsch [3] analyzed timing and conditions role of practice in developing the creative behavior in the team sports (with the ball). They studied two categories of athletes: one of which included creative performers and one that included fewer creative athletes in the sports practice. The research results reveal important differences between groups regarding the time spent in unstructured play activities and relevant difference for limited time spent in the basic training for their sport. In both cases, it could notice a determination relation between the time spent in work and the creative level;

- T. Moruţan [10] highlights a number of issues relating to fostering creativity of pupils athletes in the type of extracurricular activities. There are proposed several methods which are regarded by the author as effective for this purpose. They are: Brainstorming Method, 6-3-5 Technique, Philips '6-6' Method.

## 2. Organization of the Research

The research was organized as an ascertaining study and aimed to identify the level of creativity of the 40 players handball (female) seniors from Romania, which are activating in handball in some clubs in the top two professional leagues from this country. The women were aged between 18-27 years and they completed once a battery of psychological tests.

## 3. Material and Methods

The battery of psychological tests included three tests, as follows:

- *Questionnaire of Creative Attitudes* [9] includes 50 items that measure 16 attitudes energy, concentration, towards orientation, argumentation ideas, independence, non-conformism, self-confidence, moral values, orientation towards a future as distant, completion, risk, preferably - attraction to difficult issues, diversity of interests, spiritual values, practical values, the scale of lies. Each response is scored with points from 1 (completely untrue) and 5 (completely true). All attitudes set (except the scale of lies) are objectified of 3 items each;
- *The Test of Imagination and Creativity* [9] consists of seven samples, each having eight items. Through this tool are psychologically evaluated three factors of creative potential: originality, fluidity, flexibility, each of which meanings tailored to the scores;
- *Test of Identification the Creativity Coefficient* [11] includes 10 items related 10 creative features. It is given a score between 1 and 10 for each answer.

#### 4. Results of the Research

Table 1  
Average values (points) obtained to the Questionnaire of Creative Attitudes

Issue No.	Creative attitudes	$\bar{X}$ The average score
1	<i>Energy</i>	10
2	<i>Concentration</i>	12
3	<i>Towards orientation</i>	11
4	<i>Argumentation ideas</i>	12
5	<i>Independence</i>	10
6	<i>Non-conformism</i>	12
7	<i>Self-confidence</i>	11
8	<i>Moral values</i>	10
9	<i>Orientation towards a distant future</i>	10
10	<i>Completion</i>	9
11	<i>Risk</i>	13
12	<i>Preferably - attraction to difficult issues,</i>	11
13	<i>Diversity of interests</i>	11
14	<i>Spiritual values</i>	11
15	<i>Practical values</i>	10
16	<i>The scale of lies</i>	9
<b>Σ creative attitudes values →</b>		<b>172</b>

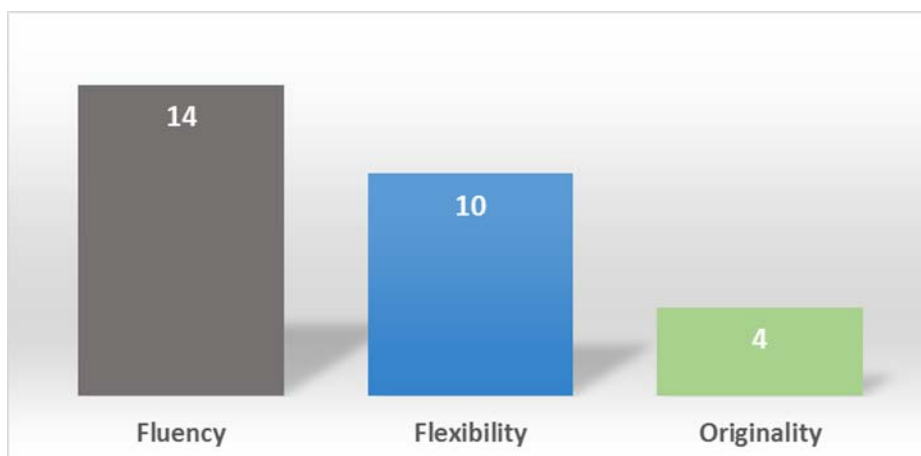


Chart 1. Average values (points) obtained to the Test of Imagination and Creativity

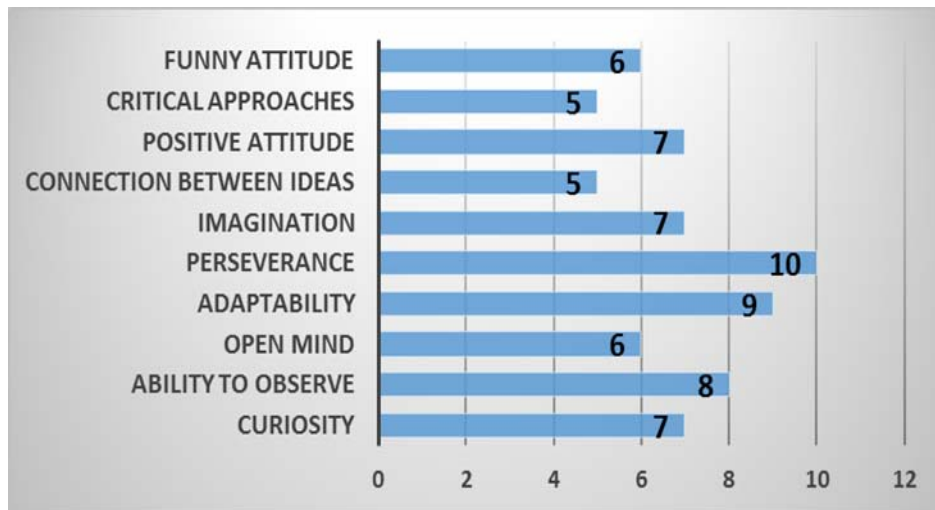


Chart 2. Average values (points) obtained from the analysis of the 10 features to the Test of Identification the Creativity Coefficient

Analyzing the value obtained to the Questionnaire of Creative Attitudes, it can be seen that the distribution of scores is one homogenous there are no great differences between the levels of expression of attitudes variants investigated with this instrument.

Observing the obtained values of the three specific parameters for the Test of Imagination and Creativity, one it can notice is that they are relevant differences between numerically and also in terms of significance.

To the Test of Identification the Creativity Coefficient the total score for the coefficient is 70 points out of 100. It can be observe a heterogeneous distribution of the calculated values, especially if we observe the maximum and the minimum requirements and frequency.

## 5. Conclusions

After applying specific battery of tests it has been found following:

- All three instruments constitute a psychological evaluation version for sport-

specific creativity, in this endeavor are not included indicators that deal directly to the handball game;

- It is known that all people are creative, and this feature is quite difficult to measure directly, by an objective manner. In this sense, the Questionnaire of Creative Attitudes identifies the set of attitudes which are essential for the creative process. The results achieved by the athletes investigated with through this instrument revealed that the level of creative attitudes is activated in a percentage calculated to 72%. The most obvious characteristic attitudes reported are: risk, non-conformism, arguments ideas and concentration. Extrapolating these qualities in the field of creativity, we can say that these features are absolutely necessary for practice with success the handball game generally, the specifics of this sports requires assuming the risk of all actions performed on a deep background of concentration caused by the very rapid succession of phases on defense and on the attack. Also, any action is always targeted, surprise the opponent is a permanent task;

- Analyzing the values obtained from the Test of Imagination and Creativity it appears that the three components of intellectual creative potential investigated, fluidity has the best look. It refers to the variety and flow of images, words and associations. In second place is emphasized flexibility that indicates the individual's ability to change and restructure thought process towards resolving a problem. The less highlighted is originality that targeted in this case unique responses in metaphorical sense. Reporting the results to specific sports activity it can be explained the low representation of originality metaphoric, in that the game of handball has an ongoing and a character pragmatic, concrete;
- The Test of Identification the Creativity Coefficient revealed that the most striking creative features are: perseverance, adaptability and ability to observe. These issues (along with those mentioned in Questionnaire of Creative Attitudes) complete the ensemble of features for a the handball practitioners;
- Analyzing the overall results following the application of the battery of tests can say that the players the handball evaluated have a fairly well creative potential issue. Although it is difficult to accurately measure the athlete's creativity as a whole, however, it provides a relevant aspect evaluated in this direction. It is known that for every post game is necessary a certain level of creativity within the meaning of successful of satisfying the tasks game while the situations are constantly changing, the overall technical and tactical processes are varied and the gameplay takes place in a context of adversity.

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