

## MODIFICATION TEST LUSHER - DIFFERENT DIMENSIONS MAKING

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*The modification of color test of Lyusher differing in application of short or full tests dot, one-dimensional, two-dimensional and three-dimensional types in various combinations and allowing to carry out diagnostics of a mental and physiological condition of the person taking into account his reaction to changes of the external and internal environment is considered.*

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In the course of the classic color Lusher test (CCTL) in psychosomatic diagnostic studies [1,2,3] examines the relationship of color and the mental state of the person. Based CCTL established categorical psychology, the use of which has proved its effectiveness [3]. Mean while, the distribution of the test in recent years with the use of computers has led to increased criticism in his address [3].

Not sufficiently studied due to color perception: genetic predisposition; the reactions of the human body to environmental changes; current, and projected the transferred diseases, type of temperament; groups and the composition of the blood, inhaled and exhaled air, sweat; social status (the real and the self-estimated ); the nature of the food; the degree of manifestation of instincts - self-preservation, reproduction, foraging; age and gender factors; chronic systemic diseases physical, mental and spiritual nature; positive, neutral or negative perception of the world and their place in it; belonging to a certain ethnic groups; place of residence and the nature of communication in the local and global society of different spatio-temporal hierarchies; operation and dominance of different senses. We will call a set of values of the specified characteristics a set – {Fs}.

By analyzing communication {Fs} with the perception of color in CCTL conducted various studies - the current state of the work presented in [4]. The conceptual and analytical models reflecting the relationship {Fs} with color perception, are not found in available information sources. Synthesize similar models offered via tools of artificial intelligence.

In this regard, it is a brief and complete test Luscher modified. Modified Luscher color test (MCTL) proposed to carry out in the following variants (short or full, individually or in combination):

- MCTL 0D - are asked to select a "points color", appears in the center of the monitor screen;

- MCTL 1D - it is CCTL;

- MCTL 2D - matrix Lusher test - available in black and white and color options, or fill color representation matrix (for example - in Figure 1), is presented on the display. Figure 1 is presented in the color options using the following colors CCTL (shown in Figure 1 by numbers): gray (number - 0), dark-blue (1) blue-green (2), red-yellow (3), yellow-red (4), purple (5), brown (6) and black (7);

- MCTL 3D - three-dimensional Lusher test - is offered at the same time requirements of the N cubes (option example - in Figure 2) to make a sequence of three cubes. We call such a cube - "cube Luscher". Number of cubes Luscher determined by

the formula:  $N = C_n^3 = \frac{n!}{3!(n-3)!}$ , where n - the number of colors. At n=8 quantity of cubes of Lyusher N=56. However, simultaneous presentation of 56 cubes causes difficulty in perception. Therefore it is recommended to use 5 colors (numbers - 0,1,2,3,7). Then, N = 10, which is an adequate opportunity of simultaneous perception of a person of multiple objects.

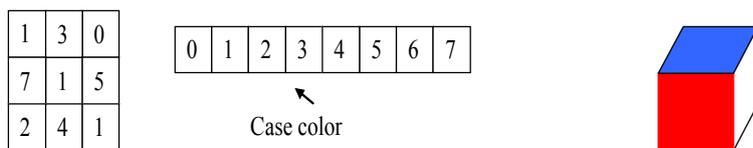


Figure 1 - examples of MLCT-2D      Figure 2 - examples of «cube» Lusher - element MLCT-3D

The methodology of the system analysis of test results MCTL application involves determining the elements of the following sets of information and relationships between them: {TestLu} - the set of tests used Lusher, {TimetestLu} - sets the time passing the tests, {SecLu} - sets the sequence of passing the tests, the set {DiagnosCond} - a plurality of diagnosed states surveyed, the set {Fs}.

In this case, an automated diagnostic decision support system is implemented in the form of peer production system based on the rules of the form:

$$\{DiagnosCond\} \Leftarrow F(\{TestLu\}, \{TimetestLu\}, \{SecLu\}, \{Fs\}) \quad . (1)$$

Thus, the offered modification of test of Lyusher allows in case of identification of functionality (1):

- to make more detailed diagnostics of a psychosomatic condition of the person as at the time of testing;
- to define its general social and psychosomatic statuses, health level;
- to predict reaction of an organism to various influences from an external environment and possible changes of the internal environment.

### The References:

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