

Optometry Testing of Real Mind Processes

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Introduction.

In modern world it is very important to be aware about human mind and its working. Every new technological advancement is based on how much information our minds can process. Therefore it is essential to have a deep knowledge about real capabilities of our mind and its operation abilities. This particular project has been conducted for the sole understanding of mind's processes through optometry testing. It is possible due a fact, that our eyes are open interface of our mind [1].

Optometry is a healthcare profession which involves examining the eyes and applicable visual systems for defects or abnormalities as well as the medical diagnosis and management of eye disease, but today it a time for creation functional optometry [2]. Functional optometry is able to carry out diagnosis and management of mind's diseases. Some preliminary results we'll discuss here.

Method.

There are about no reliable methods for studying human's mind activity and we use own developed software for experiments. Java software forms the core part of this experiment as the application for testing patients has been developed in JAVA by Rohith Sasi. The idea of test is developed and supervised by Prof Alexander Milanich.

The Preliminary Test:

The test consists from several tasks. On a screen there are ever 35 figures (*of 5 colors – white, red, green, blue and yellow and 5 types of shape – circle, square, cross, triangle, hexagon) of different shapes or colors. Patient must select figures doing next tasks:

1. Select all the same color figures. Do this test for any colors (for red, green etc. = 5 times)

*number of correct colors must be ever 7 (from 35).

2. Independent from color selection all the same shaped figures. Do this test for any types (for crosses, squares etc. = 5 times)*number of correct answers must be ever 7 (from 35).

3. Any tests must be with 35 figures with larger size compare to your sample and ever with 7 correct answer on a screen.

In tests we measure and fix: Time spent on a test.

Errors:

1. Number of skipped figures (in color or in shape tests)

2. Number of twice or more selected figures (in color or in shape tests)

We save and make able to print: **Name** of patient, **Date** of test, **Spent time**, **Number of all figures in test**, Percent (number) of **correct answers**, Percent (number) of **mistakes: Skipped % Multiple selection %**, **Incorrect selection %**.

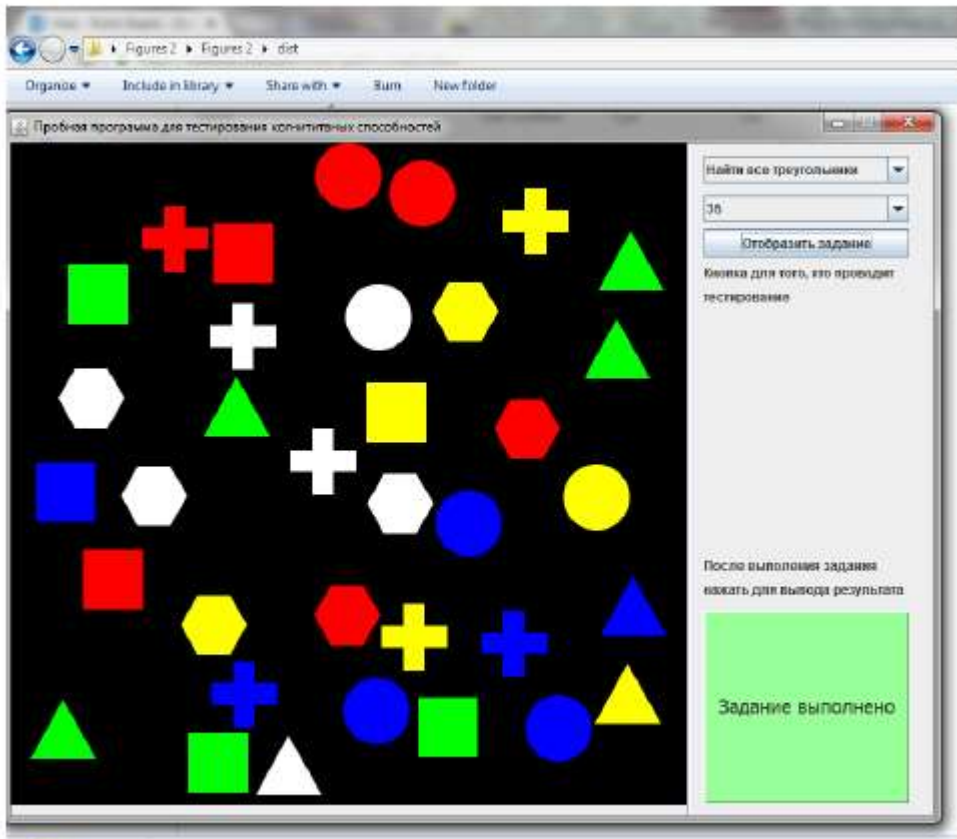


Fig. 1 Interface example

Name Of patient & Age	Date of Test	Time Spent (seconds)	Number of Figures	% Of Correct answers	% of errors
Patient 1,23	09/09/2016	488	35	83	17
Patient 2,21	09/09/2016	492	35	87	13
Patient 3,21	09/09/2016	484	35	86	14
Patient 4,36	10/09/2016	502	35	91	9
Patient 5,17	10/09/2016	479	35	70	30
Patient 6,39	11/09/2016	520	35	94	6
Patient 7,52	11/09/2016	545	35	92	8
Patient 8,19	11/09/2016	513	35	89	11
Patient 9,22	18/09/2016	499	35	74	26
Patient 10,42	19/09/2016	517	35	64	36

Fig. 2 Test's results

Results.

Fig. 1 shows example of the test and Fig. 2 shows some preliminary results.

Conclusions.

We hope our results will be interesting for applications in medical fields.

References

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