

# Physiological and Psychological Characteristics of the Student Depending on the Color of Eye Iris

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**Abstract** It is known that the environment around us is very diverse in nature, Sounds, odor and, temperature are some integral components of our surrounding environment. The human body is constantly in close reciprocal relationship with the environment. This relationship is provided through the senses. One of these organs is the organ of vision, the visual analyzer.

**Keywords** Sensor, Fibrosis, Hydrophil, Conjunctiva, Accommodation, Diaphragm, Radial, Apple of the eye, Circular, Gene, Melanin, Iris

## 1. Introduction

The main conditions of human life is planning for the future, the basis for this is the information that the human body receives from the external environment. Information entering the body from the external and internal environment ensures the constancy of some important indicators - the factor of homeostasis of the body.

The receipt and analysis of all information, whether from the internal or from the external one, is provided by analyzers, the so-called sense organs.

Analyzers are the formation of the nervous system that provide information to the human brain, and is also the structure of the ego analysis. This energy turns into nerve signals, passing several orders of the neural circuit and is transmitted to the brain. The transmission of sensory signals comes by their multiple formation and transcoding, ends with the highest analysis and synthesis (image definition).

The visual sensory system occupies an important place among all analyzers. This system provides 90% of the information the nervous system obtained from the external environment.

The outer shell, which covers the eye lobe, is covered from the outside with a fibrous covering, the shell from which goes well (absorbed) ions of sodium, chlorine and potassium. The cornea releases these ions into the lacrimal fluid and into the fluid of the anterior chamber of the eyeball. And so, the cornea has the ability of high hydrophilia and has a high conductivity of medicines that drip into the conjunctiva of the eye. The rest of the fibrous membrane is the protein shell

that performs the function of protection.

The average shell of the eye is richly equipped with capillary vessels. It consists of three parts: its own part of the choroid, the ciliary body and the iris.

The ciliary body in the place of the vessels forms an eye bottled liquid.

The iris protects the eye from the effects of various endo and exogenous factors, highlighting excess tear fluid. When increasing the secretion of tear fluid, the iris moves backward, as a result the anterior chamber is bent, and the release of tear fluid accelerates. The iris contains pigment cells that determine the color of the eye.

We have learned that, in humans, the color of the eyes is varied: black, brown, blue, gray, green. The stromal pigments of the vascular layer may be the only pigment grains or may be located on the pigment layer. If the pigmented cells are located in a thin layer, it means little stained matter. As a result, eye color receives blue, bluish, light blue and sometimes green coloration. Brown eyes contain a thick layer of pigmented cells. In the dark eyes, the pigment cells are very dense and the substance being stained is also larger than the others.

In induction of the anterior septum of the iris of the eye, there is a decrease in thickness in the stroma of the conformally woven fibers. Such changes enhance the change in eye color. The condition of the internal organs also affects the iris. In various diseases, the color of the iris pattern changes. The change in the color of the iris depends on the effects of various factors (various foreign substances entering the cornea, genetic changes, deterioration of the melanin metabolism).

This means that the eye performs not only a complex function of seeing the world around us, but also notifies us about the processes taking place in our body. Based on this, it can be said that it is possible to identify various diseases or

their prevention (hostile diseases, injuries, etc.) in the infancy and under the age of twelve years from the color and patterns of the iris. This is of significant clinical importance.

In newborns, the iris has the same, light blue color, with the growth and development of children, the color acquires a characteristic color by inheritance. In old age and in severely ill people, the iris becomes cloudy. This suggests that the pigment layer of the shell is tired and the function of the structure of connective tissue fibers has deteriorated. Dense connective tissues show the functioning of the internal organs and the familial bloating. If the body is poisoned by toxins, then sparkling, pink, brown spots or grains appear in the iris, it can also manifest itself with a deterioration of metabolism. When dizziness, in general fatigue, radial lines appear in the iris as the sun's rays. If you eliminate the above changes and effects, the signs will disappear.

The color of the iris and the function of the pigment cells is a hereditary trait. We know that each hereditary trait is determined by a gene, and one gene acts on many traits. Three genes A, B, and C are responsible for the color of the iris and formation of pigment cells. A gene provides the structure of the iris, the B gene and C genes directly control the functions of the pigments.

Based on the above data, a study was conducted with 24 students of Bukhara State University, faculty of "Natural Sciences" who are at the age of 20-22. In all students, the color of the iris was studied by the usual method. According to the color of the iris, the students were divided into three groups: iris of black color, brown color and blue color. In each group there are 8 students, and each group makes up 33.3%.

Our data fit the data of A.Ye. Kopman, where people in Donetsk were divided into groups according to eye color (green-eyed, 34.9%, brown-eyed, 32.5%, and blue-eyed, 32.6%). But the difference is that there were no people with dark (black) iris in Donetsk, and in our experience, students with blue eyes did not meet.

In many studies it is said that many diseases of the internal organs are expressed on the iris, it can even predict a disease, this can prevent diseases.

Based on this, the goal of our experience is to study the experience of changing the iris due to the influence of a hot climate on the physiological processes of the body. We have achieved that by the color of the iris which gave a possibility to determine such physiological functions as eye sight, blood type, as well as to evaluate psychological functions as thought, attention. In students from all groups of the eye sight was determined according to the Sevtsev-Golovin table, arterial pulse by the method of palpation, blood type in laboratory conditions. Arterial pressure was measured using the Korotkov method. Thinking and attention was determined by various tests and tables. All data was statistically processed and errors identified.

When analyzing students for visual acuity, the following were obtained:

50% of students with a brown iris of the eye have normal

vision, 33.4% of students have myopia, 16.6% of students have hyperopia.

Students with blue eyes have 66.6% normal vision, myopia and hyperopia of 16.7% of students.

Students with dark (black) eyes have 66.6% normal vision, long-sightedness of 33.4%, and myopia has not been identified.

According to our data, we came to the conclusion that the blue-eyed and dark-eyed students have a better eye sight than the brown-eyed.

Our research has shown that students with a brown iris are the first blood type, and students with a blue iris are the second blood type. In determining the blood group of students with a dark iris, we obtained interesting data. These students have been identified all blood types. That is, these students had the first, and second and third blood groups. According to this data, we came to the conclusion that the blood group is dominant in people with dark iris.

Our research has confirmed this once again. The students of the first blood group had a quick and broad thinking. Students who had a second blood group dominated with attention concentration.

In our experiments, we measured blood pressure, it also fluctuated depending on the color of the iris, and so, the average systolic pressure in students with a blue iris was 100 mm / ps, in students with a brown iris, the average systolic pressure was equal to 105 mm / rc., for students with a dark iris, the average systolic pressure was 110 mm / rc. From this data, we see that the lowest systolic pressure is in students with a blue iris.

## 2. Conclusions

The diastolic pressure in students with a blue iris was 83 mm / rc, students with a brown iris had the average diastolic pressure of 67 mm / rc, in students with a dark iris, the average diastolic pressure was 70 mm / rs. According to experience, we see that the lowest diastolic pressure is in students with a brown iris.

In conclusion, it can be said that the color of the eye, the color of the iris and the pigments providing the color of the eye are inherited. It is associated with a hereditary trait, the gene. Each gene affects a variety of traits. Genes B and C are responsible for the color of the iris, the formation of colored cells and the physiological processes associated with them.

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