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GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

SOI: 1.1/TAS DOI: 10.15863/TAS

International Scientific Journal

Theoretical & Applied Science

p-ISSN: 2308-4944 (print) **e-ISSN:** 2409-0085 (online)

Year: 2020 **Issue:** 01 **Volume:** 81

Published: 05.01.2020 **http://T-Science.org**

QR – Issue QR – Article

B. Qurbonova
Fergana State University
head teacher of Art and engineering graphic department

N. Djuhanova
teacher of Psychology department
Fergana State University

PSYCHOPHYSIOLOGICAL BASIS OF COLOR SELECTION IN YOUNG PEOPLE

Abstract: *This article provides a theoretical overview of the phenomenon of psycho-physiological effects of coloration and the types of higher nerve activity, the mechanisms and physiological factors of the effect of color on the human psyche, the mechanism of human nerve activity and its neural types. Provides information on methods of color selection and study of neuromuscular activity, methods of studying the sensory system, tips and recommendations for psychologists based on the study of color effects. It is revealed psychological characterization of coloring, its relation to the highest types of nerve activity, the study and analysis of mechanisms of physiological effects, the factors affecting human psyche. The scientific novelty of the article is a comprehensive analysis of the effect of color on the human psyche, providing the psychologists with the necessary information on the basis of physiological mechanisms and psychological characteristics. The information collected will serve as an additional resource for educational psychology, medical psychology, sports psychology, family psychology, and advertising psychology. The article summarizes the effects of color on the human psyche, namely psychology, medicine, construction, and others, and analyzed the psycho-emotional state of the person, the nervous system, the phenomenological effects of coloring. The article also describes the relationship between color and age and explains how each color affects human psychology. The fact that a person's color choices are dependent on his or her temperament has shown that these high levels of nerve activity can change with the influence of heredity (genotype) and upbringing (phenotype).*

Key words: *selection, youth, methods, activity.*

Language: *English*

Citation: Qurbonova, B., & Djuhanova, N. (2020). Psychophysiological basis of color selection in young people. *ISJ Theoretical & Applied Science, 01 (81),* 27-37.

Soi: http://s-o-i.org/1.1/TAS-01-81-6 ***Doi***: crossref https://dx.doi.org/10.15863/TAS.2020.01.81.6

Scopus ASCC: *3207.*

Introduction

UDC 37.02

Attitudes towards youth in our republic are one of the priority directions of the state policy. In every country, there is a great need for highly qualified personnel, as it is impossible to imagine the power of the state system, its material and spiritual development without erudite people.

Such multifaceted education is a key factor in the development of high quality inherited traits in our nation. Since ancient times our parents before marrying a daughter or a son very carefully examine the ancestors of partner of their child. It may be admitted that Hazrat Amur Temur equaled it with governmental affairs. It is a symbol of great philosophy, a strong moral belief, and the wisdom that is preserved in our nation. It is the policy of our state to develop education, health care and health care systems on the basis of such life philosophy. Each nation decides the future, development and destiny of the young generation. All fraternal people, born and raised in our country, achieve all their noble goals. In this environment, national and universal values, the

best traditions of our rich spiritual heritage, and the emerging new customs are brought together and become a powerful factor in our upbringing. Preserving the heritage of our people depends on bringing up a healthy and spiritually healthy generation. At the same time, the goal of family, state and society is to have a common goal and to form a perfect human personality in the 21st century.

Ancient prophecies and energyologists have shown that there is a deep similarity between different and certain colors. This is how the main colors are displayed. All black colors are soothing, and bright colors (light) are a stimulant. The first color which comes out the darkness is blue, and from the brightness is yellow. These are the main colors, and these colors are basis for other colors. Colors can have a physical and mental effect. There are also schools for color treatment. If a person gets tired of any color, then he\she needs to look the opposite. The state of the person changes in the opposite direction. Color also affects blood pressure –if to look blue to green, yellow to red blood pressure increases. Looking back, however, decreases blood pressure.

In ancient times, eyes were interpreted as the window of the body, the gate of perception. We have learned that our body only accepts colors through our eyes. But this is not the only channel in which the body receives color energy.

Except receptors, any tissue in the body may be absorbent.

The color effect is really unique. With the help of a specific music approach, colors can also help ill patients. This applies not only to organic diseases but also to serious illnesses. Color is mysterious because it reveals qualities that are sometimes unknown to people, depending on the nature of their choices. Colors depend on the cultural and spiritual world and values. It is also biologically linked to each person's psychogenetic code. All these were known from ancient times. Nowadays, it is necessary to translate the knowledge accumulated over centuries into the modern scientific interpretation.

Colors are very important to doctors and artists, psychologists and educators, builders and advertisers, scientists and politicians. Colors are inextricably linked to the emotional world and the mental processes.

Psychological perception of colors is linked to socio-cultural and ethnic factors. Each individual color choice depends on many factors, such as the spiritual outlook of the person, the spatial location of the color, the shape, the texture and so on.

Our brains are capable of receiving complex emotions. It also helps to respond to emotions. We can handle a lot of complex and difficult things. We breathe, cough, sneeze, vomit, we listen and re-read, talk and even dream, write poems and make quartets, poems, novels, we play baseball, music, we hear sound from instruments, we accept and think. Could such things make it difficult for another organ?

So the body with so many possibilities is made up of many elements. Our brains are made up of many elements, but these elements do not guarantee that our brains are complex-structured. The brain contains 10 (million) cells - an astronomical number; It would be interesting to see if the number of cells in the liver was counted by anyone, if there were less cells than our brains, and nobody would ever say that our liver is more complex than our brains. The biggest evidence is that our brain`s cells are related in a very complex way.

Our first cell is a neuron. It receives tens of thousands of data from other cells and transmits them to other cells, or to other neurons. These cells are very common, i.e. 10^{14}-10^{15}. Although these numbers are not large, they do take many processes.

The anatomical structure is characterized not by the number of elements but by what they do, and it is difficult to estimate them.

The human brain is like a giant organism, a printing machine, a telephone station, and a large computer. The main benefit of these comparisons is that the human brain works less in comparison with those things. The human brain's ability to function in order, can be beneficial to accomplish specific goals. These analogs are suitable for those who generally do not know computers or printing machines. To understand how the brain is structured, you need to look at the parts of it.

In the descriptions below, we provide readers with information on brain function, vision, and perception. It is very easy to explain and summarize the questions I have asked. When we look around we see the first light in the eye. The eyeball contains 125 million receptors. They are a rod shell. This is how their nerve cells are arranged. It helps synthesize electrical signals and protects light. The rest of the eye transfers the good parts of the radiation to the human body.

The processes that take place in the human brain include analysis and generalization. These processes of analysis and generalization are related to the activity of the highest integrated systems of the brain. In addition to specialized and unspecialized systems located in the brain, tolomonocartical associative systems, thalamoparistal, and thromofantal systems are also involved.

The mechanism for their processing depends on the presence of multisensor convergence, plasticity of brain cells, and temporary retention of integral activities in the hemispheres of the cerebral hemispheres.

The character and temperament of a person are related to the strength of the nervous processes that occur in the above integral systems, whether they are in equilibrium or unilaterally, in the form of excitation or braking, and the intensity of these processes. Due

to the extreme combination of these nervous processes, human activity is divided into 4 types. These are the following systems of the upper nervous type.

1. Strongly balanced character - Sangvinic.
2. Strongly balanced inert - phlegmatic nervous system.
3. Strong imbalance - choleric.
4. Weak - melancholic type.

Phenotypic changes may dominate as a result of braking of genotypically invariant processes in the development of human perception. The second alarm system – speech, of course, can play an important role in such braking, as it may brush aside some of the external influences on the cognitive and thought process as an operator. However, in instinctive activities, the genotype may be more pronounced because speech does not produce such braking. Therefore, we used A. Belov's temperament study to study 50 girls who are studying at groups BT and ST at third course in the Faculty of Pedagogy at Ferghana State University, of which 18 were chosen.

A. Belovni's method is more straightforward than the Strelyau test, MMPI test, Kettel test, which, in our opinion, is more closely related to the human instinctive genotype.

The main part.

The 18 female students were tested using the A. Belov's temperament test. The test results are as follows (table # 1):

Based on the results obtained, we analyze the color spectrum and temperament dependence:

Red - choleric type interactions:

$n=6 \qquad Dx=471-(49)^2/6=70.84 \qquad Dy=150.24-(28.44)^2/6=15.44$

$$r=\frac{205.4-\frac{49\cdot 28.44}{6}}{\sqrt{70.84\cdot 15.44}}=-0.81$$

It was found that the person with choleric temperament dislikes red.

Red - The relationship between the sangvinic type:

x	**u**	**x^2**	**u^2**	**xu**
4	3	16	9	12
6	5, 66	36	32, 04	33,96
7	4,5	49	20, 25	31,5
8	5	64	25	40
9	7	81	49	63
15	7,5	225	56, 25	112, 5
49	32, 66	471	191,54	292,96 96

$n=6 \qquad Dx=471-(49)^2/6=70.84 \qquad Dy=191.54-(32.66)^2/6=13.77$

$$r=\frac{292.96-\frac{49\cdot 32.66}{6}}{\sqrt{70.84\cdot 13.77}}=+0.84$$

X	**u**	**x^2**	**U^2**	**xu**
4	4	16	16	16
6	6, 66	36	44,36	39, 96
7	5	49	25	35
8	3,66	64	13,40	29,28
9	5,66	81	32, 04	50, 94
15	4	225	16	60
49	28,98	471	146,79	231,18

A person with a sangvinic temperament is found to like red. As the balance increases, the sensitivity of the redness decreases.

Red - the relationship between the phlegmatic type:

$n=6$ $\quad Dx=471-(49)^2/6=70.84$ $\quad Dy=146.79-(28.98)^2/6=6.81$

$$r=\frac{231.18-\frac{49\cdot 28.98}{6}}{\sqrt{70.84\cdot 6.81}}=-0.25$$

It was found that a person with a phlegmatic temperament dislikes red.

Red - the correlation between the melancholic type:

X	**u**	**x^2**	**u^2**	**xu**
4	5	16	25	20
6	2, 66	36	7, 08	15,96
7	5	49	25	35
8	7,5	64	56, 25	60
9	4, 66	81	21,72	41,94
15	4	225	16	60
49	28, 82	471	151,04	232,9

$n=6$ $\quad Dx=471-(49)^2/6=70.84$ $\quad Dy=146.79-(28.82)^2/6=12.60$

$$r=\frac{232.9-\frac{49\cdot 28.82}{6}}{\sqrt{70.84\cdot 12.60}}=-0.08$$

It was found that the person with melancholic temperament incurious to red.

X	**u**	**X^2**	**u^2**	**XU**
3	8	9	64	24
5	5, 5	25	30, 25	27,5
6	5	36	25	30
7	2, 66	49	7, 08	18,62
8	3,33	64	11,09	26, 64
9	7	81	49	63
10	3,6	100	12, 96	36
48	35,09	364	199,37	225,76

The relationship between blue and choleric type:

$n=7 \quad Dx=471-(48)^2/7=34.85 \quad Dy=146.79-(35.09)^2/7=23.47$

$$r=\frac{225.76-\frac{48\cdot 35.09}{7}}{\sqrt{34.85\cdot 23.47}}=-0.51$$

It was found that the choleric temperament does not like the blue color.

Blue - The relationship between the sangvinic type:

X	u	x^2	U^2	xu
3	3	9	9	9
5	8	25	64	40
6	3, 5	36	12, 25	21
7	8	49	64	56
8	5,33	64	28,41	42, 64
9	4,5	81	20, 25	40,5
10	5, 6	100	31,36	56
48	37, 93	364	229,27	265,14

$n=7 \quad Dx=471-(48)^2/7=34.85 \quad Dy=146.79-(37.93)^2/7=23.74$

$$r=\frac{265.14-\frac{48\cdot 37.93}{7}}{\sqrt{34.85\cdot 23.47}}=+0.17$$

It was found that the person with the sangvinic temperament was indifferent to blue.

Blue - The relationship between the phlegmatic type:

X	u	x^2	U^2	xu
3	4	9	16	12
5	4	25	16	20
6	6, 5	36	42, 25	39
7	6,33	49	40, 07	44,31
8	5,33	64	28,41	42, 64
9	6	81	36	54
10	4	100	16	40
48	36,16	364	194,73	251,95

$n=7 \quad Dx=471-(48)^2/7=34.85 \quad Dy=146.79-(36.16)^2/7=7.93$

$$r=\frac{251.95-\frac{48\cdot 36.16}{7}}{\sqrt{34.85\cdot 7.93}}=+0.24$$

A person with a phlegmatic temperament was found to be indifferent to blue.

Blue - The relationship between melancholic type:

X	**u**	**x^2**	**U^2**	**xu**
3	5	9	25	15
5	2,5	25	6, 25	12, 5
6	5	36	25	30
7	3	49	9	21
8	6	64	36	48
9	2,5	81	6, 25	22,5
10	6, 8	100	46, 24	68
48	30, 8	364	153,39	217

$n=7 \quad Dx=471-(48)^2/7=34.85 \quad Dy=146.79-(30.8)^2/7=18.22$

$$r=\frac{217-\frac{48\cdot 30.8}{7}}{\sqrt{34.85\cdot 18.22}}=+0.23$$

It was found that the person with a melancholic temperament was indifferent to blue.

The relationship between green and choleric type:

X	**U**	**x^2**	**U^2**	**xu**
3	8	9	64	24
5	5, 5	25	30, 25	27,5
6	3,5	36	12, 25	21
7	4,2	49	17, 64	29,4
8	4,5	64	20, 25	36
9	5	81	25	45
10	2	100	4	20
48	32,7.	364	173,39	202,9

$n=7 \quad Dx=364-(48)^2/7=34.85 \quad Dy=173.39-(32.7)^2/7=20.63$

$$r=\frac{202.9-\frac{48\cdot 32.7}{7}}{\sqrt{34.85\cdot 20.63}}=-0.53$$

It was found that the person with choleric temperament dislikes green.

Green - cross-linking of the sangvinic type:

X	U	x^2	U^2	xu
3	3	9	9	9
5	5, 75	25	33,06	28,75
6	4,5	36	20,25	27
7	6, 6	49	43, 56	46,2
8	7,33	64	53,72	58, 64
9	5	81	25	45
10	3	100	9	30
48	35,18	364	193,60	244,59

n=7 $Dx=364-(48)^2/7=34.85$ $Dy=193.60-(35.18)^2/7=16.79$

$$r=\frac{244.59-\frac{48\cdot 35.18}{7}}{\sqrt{34.85\cdot 16.79}}=-0.14$$

It was found that a person with a sangvinic temperament dislikes green.

Green - The relationship between the phlegmatic type:

X	u	x^2	U^2	xu
3	4	9	16	12
5	5	25	25	25
6	6, 5	36	42,25	39
7	6,4	49	40, 96	44, 8
8	2, 66	64	7, 07	21,28
9	5	81	25	45
10	5	100	25	50
48	34, 56	364	181,28	237,08

n=7 $Dx=364-(48)^2/7=34.85$ $Dy=181.28-(34.56)^2/7=10.65$

$$r=\frac{237.08-\frac{48\cdot 34.56}{7}}{\sqrt{34.85\cdot 10.65}}=0.05$$

A person with a phlegmatic temperament is found to be indifferent to green.

Green-melancholy type relationship:

X	u	X^2	u^2	XU
3	5	9	25	15
5	3,75	25	14, 06	18, 75
6	5, 5	36	30, 25	33
7	2,8	49	7, 84	19,6
8	7	64	49	56
9	5	81	25	45

10	10	100	100	100
48	39, 05	364	251,15	287,35

n=7 $Dx=364-(48)^2/7=34.85$ $Dy=151.15.28-(39.05)^2/7=33.3$

$$r=\frac{287.35-\frac{48\cdot 39.05}{7}}{\sqrt{34.85\cdot 33.3}}=+0.57$$

A man with a melancholic temperament is found to like green.

Black - choleric type interrelationship:

X	**u**	**x^2**	**U^2**	**xu**
5	6	25	36	30
6	4,5	36	20, 25	27
7	4,5	49	20, 25	31,5
8	4	64	16	32
9	3	81	9	27
10	0	100	0	0
14	6	196	36	84
59	28	551	137,5	231, 5

n=7 $Dx=551-(59)^2/7=53.71$ $Dy=137.5-(28)^2/7=25.5$

$$r=\frac{231.5-\frac{59\cdot 28}{7}}{\sqrt{53.71\cdot 25.5}}=-0.13$$

It was found that the person in the sangvinic temperament was indifferent to black. With increasing of imbalance, the intensity of black sensation is low.

Black - The relationship between the phlegmatic type:

x	**u**	**x^2**	**u^2**	**xu**
5	5, 66	25	32, 03	28,3
6	5,5	36	30, 25	33
7	5, 5	49	30, 25	38,5
8	5,25	64	27,56	42
9	6	81	36	54
10	3	100	9	30
14	1	196	1	14
59	31,91	551	166,09	239,8

n=7 $Dx=551-(59)^2/7=53.71$ $Dy=166.09-(31.91)^2/7=20.63$

$$r=\frac{239.8-\frac{59\cdot 31.91}{7}}{\sqrt{53.71\cdot 20.63}}=-0.87$$

It was found that a person with a phlegmatic temperament dislikes black. As the blackness increases, the phlegmatic personality tends to decrease the sensitivity of the black.

Black - The relationship between melancholic type:

X	u	x^2	u^2	xu
5	5	25	25	25
6	2,5	36	6, 25	15
7	5,5	49	30, 25	38,5
8	3,25	64	10,56	26
9	3	81	9	27
10	9	100	81	90
14	8	196	64	112
59	36, 25	551 551	226, 06	333,5

n=7 $Dx=551-(59)^2/7=53.71$ $Dy=266.06-(36.25)^2/7=38.33$

$$r=\frac{333.5-\frac{59\cdot 36.25}{7}}{\sqrt{53.71\cdot 38.33}}=+0.62$$

A man with a melancholic temperament is found to like black. Increasing levels of melancholy may lead to increased black sensitivity.

Yellow - choleric type interrelationship:

X	u	x^2	u^2	xu
4	5, 5	16	30, 25	22
6	4,5	36	20, 25	27
7	5, 5	49	30, 25	38,5
8	5, 66	64	32, 04	45,28
9	1, 75	81	3,06	15, 75
10	2	100	4	20
11	6	121	36	66
15	7	225	49	105
70	37,91	692	204,85	339,53

n=8 $Dx=692-(70)^2/8=79.5$ $Dy=204.85-(37.91)^2/8=25.21$

$$r=\frac{339.53-\frac{70\cdot 37.91}{8}}{\sqrt{79.5\cdot 25.21}}=+0.17$$

The choleric temperament was found to be insensitive to yellow. As the imbalance increases, the sensation of yellow becomes less sensible.

A person with a sangvinic temperament was found to like yellow.

Yellow - The relationship between the phlegmatic type:

x	u	X^2	U^2	xu
4	5	16	25	20
6	5,25	36	27, 56	31,5
7	5, 5	49	30, 25	38,5
8	6	64	36	48
9	5,25	81	27,56	47, 25
10	6	100	36	60
11	1	121	1	11
15	4	225	16	60
70	38	692	199,38	316,25 25

n=8 $Dx=692-(70)^2/8=79.5$ $Dy=199.38-(38)^2/8=18.88$

$$r=\frac{316.25-\frac{70\cdot 38}{8}}{\sqrt{79.5\cdot 18.88}}=-0.41$$

It was found that a person with a phlegmatic temperament dislikes yellow.

Yellow - The relationship between melancholic type:

X	u	x^2	u^2	xu
4	2,5	16	6, 25	10
6	4	36	16	24
7	6	49	36	42
8	2, 66	64	7, 08	21,28
9	6,5	81	42, 25	58, 5
10	7	100	49	70
11	8	121	64	88
15	4	225	16	60
70	40, 66	692	236,58 ***c o*** 58	373,78

n=8 $Dx=692-(70)^2/8=79.5$ $Dy=236.58-(40.66)^2/8=29.93$

$$r=\frac{373.78-\frac{70\cdot 40.66}{8}}{\sqrt{79.5\cdot 29.93}}=+.036$$

According to the results obtained by the color sensitivity level of the students we have studied 1 student with "good" color vision level 1 to 0, or 29 to 25, 15 students with "average" color sensitivity the range of 6-10 or 24-20, and 2 students with "satisfactory" color sensitivity range of 11-15 or 19-15, there are common differences.

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