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# Psychological Impact of Colors on 7-11 years Hyperactive Children

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#### **Abstract**

Hyperactive deficit disorder is one of the most common psychiatric disorders in children at school age, which, if not identified can lead to complications and irreparable harm. Hyperactivity disorder is described as an impulsive pattern and neglected, which often begins before the age of seven. Lack of tranquility and concentration, as well as lack of irrational behavior control in children is normal. But in children with this symptom, the severity of these problems disrupts everyday life. The child's psychology focuses on children physical growth, mental, emotional and social development. The childhood is the most important and influential period in the life of humans. The effect of colors on hyperactive children has been focused. In psychology, color is full of extraordinary power that affects humans through the five senses. Colors, has various effect on soul and body of human. In the color dimension and psychology of color, the meaning of color therapy, is the use of colors in various ways used to improve health. Colors generally affect on the physical state of the mood, that is, it affects the warm, sensational feelings, or vice versa, cold with depression. Color can heal the human soul and bring joy. With the aid of colors can create harmony between the body and soul. This research investigates the psychological impact of colors on 7-11 years hyperactive children. The data collection is through library and field studies and a descriptive-analytical method. In this study, it can be proved that the effect on the hyperactive children.

Keywords: Hyperactive Children; Color logy; Color Therapy

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### 1. Introduction

Colors affect the human soul and results in the change of behavior. This kind of change leads to an evolution in properties and personality of individual; and thus effects the nerves and human psychology. The color gives us the power that is natural and healing. Color has a dramatic effect on the children's spirits. They tend to choose brighter colors. The child is naturally interested in bright and happy colors, and denies dark and desolate colors. Children physically react to colors. Hyperactive children are vibrant, naughty and difficult to control them. In this paper, an attempt has been made to show the positive effects of colors on hyperactive children.

One of the most common childhood disorders that have attracted the attention of psychologists and psychiatrists is the hyperactivity disorder. This disorder was for the first time detected in 1845 by the German doctor Henry Hoffman (Jamali Pakhaleh et al., 2011: 20).

This disorder is common and diagnosis is difficult for doctors. Hyperactivity disorder is a complicated disease and is often not diagnosed (Shahsabani, 2018: 8). Factors causing this disease are genetic factors, minor and intolerable injuries during pregnancy and childbirth (such as lack of oxygen and increased pressure on the fetus), environmental and nutritional factors (such as mother's alcohol consumption during pregnancy) and acquired factors (such as family, mental-social factors and low birth weight) (Nasrollahzadeh Masoumian et al., 2013: 516).

# 2. Methodology

The purpose of this study is to address the psychological impact of colors on hyperactive children 7-11 years. In this paper, the morality of hyperactive children as a branch of color psychology has been studied. Color is one of the reasons that influence child dynamics. In this context, the color provides a kind of affection or renewal of the spirit or fatigue of the soul at place. Children need to be dynamic for their body and soul to be health, human beings communicate with the environment through color. The effect of colors on humans brings in a change in behavior; a color stimulates the middle portion of the brain, and consequently affects the human nerves. It does not seem that these hyperactive children have a particular problem in processing the information, instead their problem is self-reliance. Most of these children are bad-temper and aggressive and other children do not have a favorable opinion.

In general, the hyperactive children are libelous, insincere, negative, stubborn, unconscious, and impatient. Children have a positive reaction to bright colors. Children prefer high-saturated colors and dark colors give rise to frustration. Low-saturated colors create a sense of tranquility in children. Children and adolescent show more reaction to color than forms and enjoy it with full pleasure. To improve the condition of hyperactive child, use vibrant colored clothes because the color of energy affects children. The color therapy should not be considered as the main factor of treatment, but must be used to strengthen other methods for improving the mental status of the hyperactive child.

# 3. Behavioral Characteristics of Hyperactive Children with an Emphasis on Disorder Deficit

- 1) Movement of hands and feet without any specific aim
- 2) Inability to follow the training
- 3) Twisting in sitting position

- 4) Frequent change of activities and games
- 5) Frequent loss of personal belongings
- 6) Carrying out hazardous work in a careless manner
- 7) Frequently moving
- 8) Talking a lot
- 9) Make trouble for classmates
- 10) Quick response before hearing the question thoroughly
- 11) Do not follow the turn
- 12) Distraction due to external influence
- 13) Lot of noise while playing
- 14) Not to listen to others by avoiding it
- 15) Standing most of the time
- 16) Frequent mistakes due to inaccuracy
- 17) Interrupting speech or interference in others work
- 18) Get out of the chair without permission
- 19) Problems in establishing relation with classmate and as a result the classmate denies to accept them
  - 20) Disrupting in learning and doing few things together

Be careful that ADHD children are not foolish, but they have the difficulties to focus and concentrate, and their mistakes are not due to their ignorance, but it is due to their carelessness. (Kordloo et al., 2013: 39-40, 44). About 8-12% of the world's children suffer from this disorder (Nasrollahzadeh Masoumian et al., 2013: 515). This disorder is higher in boys and parents find these symptoms lesser in girls than boys. These children have problems in socializing with same age group and are isolated. One prominent example in girls is distraction (Akhavan Karbasi et al., 2007: 30). The outbreak of this disorder in boys is three times that of girls, and these students are in primary education, and if diagnosis and treatment is done earlier will prevent from further consequences (Salami et al., 2016: 33).

Playful children are often naughty and seductive behaviors, such as hyperactive children, and they may go up and down all the time and constantly talk in middle of your talk and not be in a place and people around may tell you that your child is hyperactive, but in this condition it is better to know that the main characteristic of hyperactivity is active, lack of attention, and ultimately impulse behaviors (such as sudden and unpredictable things). Often hyperactive children in different places show hyperactive behaviors, and even while playing they get bored and in school may leave the classroom (Shahsabani, 2018: 3).

These children usually look for active resistance to muscle, deep-touch stimulation, or stress and tension joint articulation. For example: banging their legs instead of walking, deliberately falling or dealing with objects or other people or pushing big objects. Problems with executive function cause

the planning disorder for start and end of homework, memorizing homework, memory disorder, learning disorder, lack of attention and pursuit of targeted behaviors (Salami et al., 2016: 32).

# 4. Color Psychology

Life is full of color and color effects. The importance of color in life brings to life the various concepts in our minds. Therefore, the presentation of a definite definition and brief interpretation of colors will not only cover the broad and comprehensive concept of color, but also mislead the broad dimension of its perception. According to Ethan, color itself is life (Hosseini Rad, 2010: 94). The colors have name, luminosity and saturation. The main colors in fact are primary shades, (yellow, red and blue) and their combination gives the secondary shades. Brightness indicates the degree of darkness and brightness. Most of the brightness is related to yellow, and less related to purple (Ostovar, 2012: 5). Children are often interested in red color. The red color has a high visibility capability and always attracts the attention of the viewer (Ostovar, 2012: 20). The colors affect human spirit and cause the changes in its behavior, and this kind of transformation causes the change in character and individual personality. Color stimulates the middle part of the brain and thus affects the human nerves and psychology.

From the view point of the chromaticity, a psychological equilibrium is created in humans when the relation between human, color, and nature is balanced. In that case, it will have a positive effect on the human spirit and soul. Otherwise, with the lack of proper replacement of color in its particular place and its incorrect use in human environment will have severe mental effects on individuals.

For example, the effects of color on human spirit and soul can be mentioned:

- Red color can be a source of disturbance in humans, therefore, nerves people should not be exposed to red color, because they can exacerbate their discomfort. The red color is pleasant to humans for a short time, but after a while it becomes annoying and causes mental illness and tiredness (Ostovar, 2012: 28).
- Yellow color is a mental stimulating mode and enhances human thinking and causes relaxation and happiness in the spirit of humans. This color is the spiritual, ideal and philosopher's color and stimulates the thought and sedation of some neurotic states (Ostovar, 2012: 28). In Quranic verses, five mode of yellow are used, one of which refers to the joyous yellow effect (Baghera, surah 69).
- Blue color gives a sense of relaxation, reduces excess body heat, relaxes and refreshes the nervous system when human face this color (Ostovar, 2012: 29). This color is useful for meditation and awakening. Blue creates the possibility of fight against selfishness. This color opens up the human soul to problems and creates a balance between the person and others (Daad, 1990: 52).
- Green color has a funny and cool effect that does not cause permanent contact with this color. In the verses of the Quran, the most beautiful color is the green color that paradises of their garish and silk garments are in green (Kahf surah 29) (Ostovar, 2012: 29). At the same time, this color is carefully used. Avoid wearing permanent clothing with this color, or surrounded by this color, which in the long term can bring disturbances at the level of the two primary centers of the body (tendency and jealousy) (Daad, 1990: 50). The green color reduces blood pressure and cleanses blood and tissues from germs. But its main role is to help to eliminate the important psychological problems or feelings.
- White color is graceful and shiny and sparkling of the germs, the sign of purity. The white dress makes the man appear as it is and, on the other hand, has spiritual appearances (Ostovar, 2012: 30). The white color is used for restoration of work and causes the tuning of chronobiologic rhythm that studies the biologic rhythms in living organisms. Biological rhythms include a range of

biological phenomena that are periodic and predictable. The white color increases the secretion of serotonin, setting up sleep, creating a balance between the physical and hormonal system (Nourabadi, 2006: 63).

- Black color, unlike white, is an inactive, silent, static and non-stimulating color, while avoiding any kind of psychological and physical stimulation, and reduces other activities and leads to laziness, and sadness. Therefore, it is advised not to wear black clothes unless necessary (Ostovar, 2012: 30).
- Gray color is free from any stimulation or inner tendency, does not create anxiety, and calmness. This color causes the eyes and nerves from getting tired. The eyes and nerve tend to gray color, when this color does not exist; it creates discomfort, because the calmness that occurs due to gray color disappears. The gray color such as harmony color has calm effect on human nerves (Ostovar, 2012: 31).
- Orange is a powerful color, and Dr. McNeutton calls it an anti-fatigue color. The orange relatively to red, is more balanced and therefore has a mild effect. For this reason, it can be used in more cases. Orange color stimulates the respiratory system and helps to stabilize calcium. Creates optimist individual and there is no specific prohibition on orange color (Daad, 1990: 48).
- Purple destroys body toxins and stimulates the build-up of leukocyte cells. Increases the emotional effect, reduces the feelings of hatred, irritability and anger, and calms the desiring emotions, significantly reduces anxiety and fear. This color stimulates the energy center of the head. There is no specific prohibition on violet color (Daad, 1990: 54).
- Indigo is an active color with cool and astringent condition and its main use is its anesthetic power. The anesthetic effect results in anti-sensitivity. This state is not only related to the unconsciousness, but also because of the increase of awareness that with stimulation of center of energy of the forehead results in the ability of physical body to be forgotten (Daad, 1990: 53).
- Turquoise color has both blue and green properties. The influence of power is general, activates the skin regeneration in relation to burns, shocks and injuries. This color relaxes the mind after mental activity.
- Lime color has a stimulant effect, detoxification of the body, stimulation of vital forces in chronic discomfort, fatigue, bone stimulation, stimulation of the central nervous system: memory, concentration, gallbladder discomfort (Daad, 1991: 55).

In general, bright colors have a lot of stimulation effects, because of this reason the colors close to white, in addition to increasing the general activity of the body, causes progress in occupational and professional activities (Ostovar, 2012: 31). In contrast, dark colors such as dark blue, blue and black because of reduction in the light reflection has less stimulus effect and reduces the activity. Therefore, in any environment appropriate color for the environment should be used (Ostovar, 2012: 32).

Sometimes the effects of color are so intense that it may lead to moral and physical reaction. The perception and emotion that is created by seeing the color is a complex reality. On one hand, depends on its reality and on the other hand it relates to the person's mental, psychological and mental structure (Hosseini Rad, 2010: 119).

German Psychologist Asen says: the most prominent color indexes of children are four colors that are red, orange, yellow and blue. On the other hand, gray, black, brown and white are not favorite colors of children and harms them (Hasheminia, 2017: 3).

Children through colors feel and understand the place. The human through colors connect to the surrounding environment or gets attached to the environment or rejects the environment. Therefore, color has a great influence on the perception of the environment. Children need dynamic (physical

and dynamic) for health and spirit. This dynamic requires the creation of its context by creating its components. Color is one of the factors influencing the dynamics of children (Hasheminia, 2017: 5). Painting in childhood was our first unconscious effort to use the power of colors. Colors give us a mental balance and this is nothing but mental health (Brand Flemmar, 1997: 13). Since past, the role of colors has been recognized in treatment, as in ancient Egypt, patients were placed in special rooms with color (Nourabadi, 2006).

A nervous person has more waves than a calm person. When red color surrounds the person his anger is intensified, because red color adds energy to the body. But on the contrary, the blue color neutralizes the thrill energy which causes the calmness of the anger. Of course, one does not see these reactions but just feel it (Brand Flemmar, 1997: 15). Color therapy means the use of colors in different ways used to improve health (Nourabadi, 2006: 62).

The primary color in the rainbow has proven their healing qualities. Colors can be used to create energy balance in various areas of the body that lack vibration and physical movement, and people with mental, emotional problems (Dargahi and Rajabnejad, 2014. Colors produce hormonal secretion. Chronic mental illnesses can be curable through color therapy. Nerve diseases such as fear and anxiety have responded positively to color therapy (Dargahi and Rajabnejad, 2014: 22). Experts of color therapy believe that colors are useful to treat many diseases (Dargahi and Rajabnezhad, 2014: 25). However, colors have a severe effect on our energy. Health methods through colors are analyzed to determine how to dress and how to treat patients through color therapy (Daad, 1990: 13).

It should not be forgotten that color therapy can be very popular (Color books for your health, scientific method color therapy using color therapeutic properties, 1990: 16). Dr. McNutton believes that we do not see the real colors, but feel their effect on biological mechanisms (Daad, 1990: 24). The use of clothing as a means to improve the physical and psychological is an important factor in creating the balance. The color of our clothes affects our emotions rather than our physical health, because the color refraction found through clothing is less intensive than sunlight or a color therapy lamp (Daad, 1990: 63).

**Red Dress**: For short periods such as sport competition that need a lot of effort and to stimulate appetite and to have the power to struggle in all areas.

Yellow Dress: used to strengthen the nerves and the brain, for example during exams.

*Orange dress*: to concentrate intelligent impersonation on the body, feel pleasing, well-being and to increase sexuality.

*Green or Gray dress*: These clothes should be used in extreme periods of distress, emotional or anxiety. In this case, you should use pure green color, but not to be worn for a long time.

*Blue or Violet dress*: Suitable for relaxation and openness to others. But be careful, wearing permanent blue color clothes will cause chronic fatigue, indigestion and chronic constipation.

White dress: Allows others to see you as you are (Daad, 1990: 64).

Color has a great effect on children's spirits. Note that the use of cheerful colors in children's clothes makes them tired. It is best to use gentle, calming colors clothes. Strip fabric, spotted, floral, Barbie design with mild colors is more suitable for the children (Research and Planning Organization, 2017: 157). Children after getting acquainted with colors shows reaction till a place where they prefer some of the colors rather than others (Akhundi, 2008: 6).

### 5. Conclusion

If child's parents play their role well among all those who are involved in the treatment of the child (such as teachers, physicians, psychologists and other members of the family) will be the most important and best support for the child. The result of these supports is that you can help the hyperactive child and to move towards success. They have difficulties in organizing and completing their homework. Usually, it is the notion that they do not listen at all, and they do not hear what they were told to do, and it seems that they cannot sit quietly. It seems that these children have problem in processing information. They usually overlook their daily activities, lack of attention during their hyperactivity situations may be left as restlessness, cannot sit at one place, jumping in unprovoked situations, inability to talk less, talking a lot.

Children have a positive reaction to bright colors, including pink, red, yellow, blue, purple and green. The black and gray react negatively. Among colors children prefer high-saturated colors and dark colors give them a sense of discouragement and low saturated colors create calmness in children.

Children often express their positive emotions with joy and strength; and their negative emotions with sadness and frustration. Based on the research, the red color with the highest number and pink color creates the lowest emotional responses in children. Children and adolescents show more reaction to colors than the form. The world of colors is a strange world, each with its own special effect on the child. Generally, no color is prohibited for any age.

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