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A CHILD AND TV

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Abstract. The article is devoted to the study of the impact of television on children. The effect on human physiology is described. The consequences of watching TV shows are noted. Parents can find answers to their questions. You can find tips on how to replace watching TV.

Key words: television, television, child, speech, development.

Talking to parents about poor school performance, you often think of the impact of television on a child's mind. Adolescents can watch several films a day as well as young children can spend several hours a day watching cartoons. Both adolescents and young children struggle to tear themselves away from watching. Must we really accept it because of the development of modern technologies? Perhaps it's high time to sound the alarm. The results of total dictations show falling literacy rates and children's school essays demonstrate that they can't express their thoughts. It's wrong to search for a reason for these circumstances in watching TV, there are many other reasons that have the impact on children. But the main factor of developmental deviation of children is immoderate use of means of technical progress. It's impossible to eliminate all the comforts of humanity because many of them are useful. That's why it's necessary to educate children how to treat entertainment content.

Television gives an opportunity to observe world life. That's the opinion of the most audience. Here we have news, economics, politics. But in most cases, they are entertainment programs, which reduce not only intelligence, but also the spiritual development of our society. We, parents, don't think about the impact of television on neuromuscular and sensory processes of a child. Also, television has the impact on biochemical and endocrine processes. It's important not to forget that vision is an active process in which the muscles must tense up to perceive the image being transmitted. If we look at a motionless picture, we can examine this object. When the picture changes quickly, the muscles have to contract very quickly, and they become overstrained. A person can't realize how quickly the muscles contract. The picture on the screen consists of dots, that's why our eyes can't focus properly. As our eye can distinguish much finer details, and the TV screen presents a blurry image, far from the resolving power of the eye, then the retina degrades. In natural conditions, changes in the brightness of objects are up to 180 dB. On the TV screen, due to the peculiarities of phosphor excitation, the range of brightness changes is no more than 60 dB, which leads to eye fatigue. The picture of the screen isn't stable, it constantly blinks and flickers. It leads to both eye strain and nervous system overstrain and, as a result,

people have visual impairment. To catch the reduce of eye activity during watching TV, you need to observe the changing size of the pupils that means that our brain works very active. If the gaze “freezes”, then the body also falls into this numbness.



Picture 1. Watching TV for children is like a hypnotic state

According to one of research that took place in 1970 and was done by Herbert E. Krugman, when a person was watching TV, beta frequencies (14–30 Hz) disappeared, but alpha frequencies (8–13 Hz) dominated. Researchers supposed that the domination of alpha frequencies was a sign of the decline of visual attention.

Gamma waves are the fastest. They are generated in both hemispheres of the brain and reflect peak activity of consciousness. It is considered that our brain generates gamma waves when people need to work with different types of information simultaneously and link that types of information together very quickly. A small amount of gamma waves leads to a reduction in the ability to remember things. Beta waves are generated by the left hemisphere of our brain and take responsibility for solving our problems, logical thinking, concentration, decision making. These waves allow us to be active in society daily. Beta waves are the material world and our consciousness. The amount of beta waves increases when a person works with material world and during communication, education and restless and anxious states. Beta waves make the work of our brain faster, increase the processing and assimilation of information, raise the overall energy level of the body, sharpen the senses, excite the nervous system and relieve drowsiness. Beta rhythm is the fastest. Beta waves can help to accelerate the brainwork, increasing the ability to fast thinking, generation of new ideas and, in general, stimulating a constant style of life in a highly functional state. Beta waves help to accelerate mental processes in work and study. Nearly one hundred years ago, Hans Berger, a German professor of psychology, studying



electrical activity of the human brain, was the first to discover weak oscillations with a frequency of 7-12 Hz and named them alpha waves. When your brain works in an alpha rhythm, you enter a state of hypnotic trance, which can also be achieved with the help of meditation or induced through hypnosis. Scientists found out that when a person is in a state of hypnotic trance, the rhythm of brain functioning reduces on the physiological level up to alpha level. This state is like a hypnotic state, and it is impossible to resist it. And that is true because an EEG shows the same symptoms as symptoms during watching TV. This state concerns not only consciousness but also metabolism in general. The consequence of this process is children's and adolescents' obesity. There is a conclusion that children under four years old mustn't watch TV. Considering the visual perception process, watching TV should be forbidden, even if they watch kind programs. Hans Jürgen Scheurle, a physiologist, says: "The brain of a newborn is already nearly completely formed, but functionally not developed yet. The final number of nerve cells is almost reached. But the nerve endings and their physiological nerve connections, synapses, are still in infancy, and they develop during life. The growth of brain mass after birth is based almost exclusively on the growth of these neural connections, which determine the final weight of the brain." That means that it is necessary to use time when the brain is more flexible, i.e. childhood, for formation of new nerve branches, because missed phases of formation of certain vital functions may be impossible in the future. In childhood it is better to develop the child's fine motor skills, sense of balance, strengthen the vestibular apparatus. All that develop the body up to maturity in the current conditions of life. Sometimes all these life conditions are convenient and comfortable, but they restrict space for children's games. And that leads to movement deficit. Nursery rhymes play a special role in the development of children at early preschool age: the sound flow of speech has an activating effect. Simple rhyme, repeated words, exclamations and emotional appeal involuntarily make the child listen and repeat the words. Repeated sound combinations, words, their melodiousness create the effect of musicality. With their help, the child's speech, hearing and pronunciation of sounds develop are developed with the help of nursery rhymes. Also, modern children lack the emotional-tactile connection between an adult and a child and nursing rhymes help to correct it. They also allow us to have elements of motor activity in the learning process which are connected with the formation of speech activity. The more small and complex movements a child does, the more parts of his brain are involved in the work. Poems with moves let a child do different actions which develop fine and gross motor skills. This helps to develop children's physical development. Imitation of the words of nursery rhymes coordinates the movements of children, the connection of the text with motor skills develops attention.

It's important to mention that children think of everything they see on TV as a real thing, they can't separate it from reality. That means it is necessary to be next to the children even if they watch children's programs. But it's better to spend more time playing with them or creating something. This

is reading out loud every day, singing together and doing crafts. Even doing household chores together with a child will be richly rewarded. All these actions develop a child's thinking and imagination.



Picture 2. Communication with children during games and creativity

It is worth saying that many parents are concerned about both declining literacy and poor speech skills. Children of our time have difficulties in expressing their thoughts. Mothers of toddlers of age three begin to worry if a child doesn't speak. And why should we be surprised by that fact? First of all, children assimilate the language from their parents, who are very busy now and don't use their speech often. Even if they have free time from their work, they surf the Net or watch TV. As a result, it is easier for them to have a child watching TV and they can do their own business. Unfortunately, this kind of time spending prevents speech formation and articulation. Children's stimulus for development of motor skills and sensory organs are disappeared as they don't have stimuli from the surrounding world. And general motor skills of the person's body are connected with motor skills of speech, articulation, and sensory abilities.

In conclusion, there is a hope that adults will realize their role in bringing up and developing children and find time for communication with them. And this communication will be full of love and care. Mind that our children's health is in our hands.

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