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### Adaptive Resource Of Disabled Persons With Hemiparesis Who Underwent Hemorrhagic Stroke.

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#### ABSTRACT

The onset of hemorrhagic stroke very often leads to hemi paresis, leading to violations of personal adaptation, increased anxiety and persistent depression. The purpose of the study is to find out the state of the adaptive resource of a person's personality with hemi paresis after a hemorrhagic stroke. It was found out that disabled people with hemi paresis after a stroke at adulthood are much more likely than children with disabilities to feel unsatisfactory, low activity and bad mood. It is established that a stroke with hemi paresis is capable of becoming a trigger for the development of strong anxiety, frustration and aggressiveness. Invalids of childhood basically have an understated level of ability to translate life plans based on personal values and personal interests. They do not have personal involvement in their lives, which almost always goes on in a measured and little way to planning and adjusting. It was found that people with hemi paresis due to stroke are characterized by an increased desire to start life anew, to revise their life values. It became clear that among disabled people with hemi paresis as a result of hemorrhagic stroke the majority are people who have internal resources and willpower. At the same time, their life manifestations are hampered by the presence of neurotic disorders and strong self-doubt caused by unexpected disability and fear of further life. **Keywords**: personality, invalids, adaptation, stroke, hemi paresis, infantile cerebral palsy.



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#### INTRODUCTION

Ontogeny is inevitably accompanied by the development of various dysfunctions [1, 2], pathological conditions [3, 4], the number of which inevitably increases with aging [5, 6, 7]. Despite the serious success of medicine, there are still many unresolved problems of recovery of the adult population in physical [8, 9] and psychological terms [10, 11]. The severity of this problem is provided by a large number of disabled adults in the population of developed countries, the number of which tends to increase [12, 13]. One of the most common categories of people with disabilities is people with hemi paresis after a stroke [14, 15]. It becomes clear that the damage to brain tissue in stroke is not only capable of damaging the somatic structures of a person, but also affecting its personality characteristics, the degree of which depends heavily on the initial state of the personality's adaptive mechanisms.

It is noted that the onset of disability associated with stroke is a serious psychological crisis for a person, requiring him to make enormous internal efforts aimed at restoring interaction with the society [16, 17]. In this regard, it is necessary to systematically study the characteristics of the psychological characteristics of persons who have suffered stroke and become disabled as a result of them. They are able to help reveal the peculiarities of the psychological mechanisms of people's adaptation to the new conditions of life and continue to improve the ways of their psychological support. This is the purpose of the study - to assess the adaptive resource of the disabled person's personality in the event of a late defeat in their musculoskeletal system.

#### MATERIAL AND METHODS OF INVESTIGATION

The study was approved by the local ethics committee of the Russian State Social University on September 15, 2016 (protocol No. 9). 128 disabled people with pathology of the musculoskeletal system of the first adult age were examined. All of them were divided into two equal comparable, homogeneous groups. The first group (experimental) was represented by people who adulthood due to hemorrhagic stroke. The number of people surveyed in the group was 33 (17 men and 16 women), with an average age of 48, 8±3, 2 years. The period of disability in this group is at least 3 years. The second group of people with disabilities (control) are disabled children born with infantile cerebral palsy. The total number of people surveyed in the second group was 32 (15 men and 17 women), with an average age of 51, 0±2, 7 years.

To assess the adaptive resource of personality the following methods are applied:

- A methodology for assessing the quality of life, taking into account the level of psychological and physical well-being. The physical component was assessed on the scales: "physical functioning", "role functioning due to the state of health", "pain intensity" and "general health". The psychological component of the quality of life was determined using the scales of the questionnaire, "mental health", "role functioning, conditioned by the emotional state", "social functioning", "vital activity" [18];
- Express self-evaluation of well-being, activity and mood. Self-awareness was assessed by indicators of strength, health and fatigue. Activity was characterized by mobility, speed and rate of flow of functions. The mood was assessed according to the characteristics of the emotional state [19];
- "Self-assessment of mental states" Eysenck, revealing the level of anxiety, frustration, aggressiveness and rigidity [20];
- a scale of depression that allows you to differentiate depressive states and conditions close to depression [21];
- A scale of existence that allows us to identify with 46 questions, a subjective perception of a person's life [21].

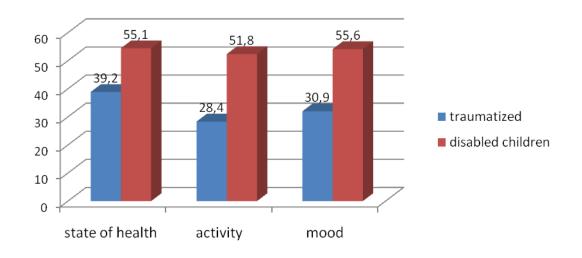
The data obtained during the study were subjected to statistical processing with the calculation of the arithmetic mean (M), the error of the average value (m), and the application of a standard set of statistical analysis methods.

#### **RESULTS AND DISCUSSION**

Invalids with hemi paresis after a stroke system experienced inadequate well-being, low activity and bad mood more often than children with disabilities (Figure 1). In the group of disabled children, the average



arithmetic values of the studied indicators are approximately equal, which indicates that they have no acute fatigue and fatigue.



#### Points

#### Figure 1: The level of well-being, activity and mood in the groups of subjects.

The results of the study of self-assessment of mental states, performed with the help of Eysenck's method, allow us to say that significantly significant differences between mean arithmetic meanings were recorded according to the indices of the level of development in the subjects of anxiety, frustration and aggressiveness.

Considered indicators	Experimental group	Control group	Р
Anxiety, points	16.3±0.36	11.0±0.27	< 0,05
Frustration, points	17.4±0.34	11.2±0.29	< 0,01
Aggressiveness, points	17.9±0.47	13.1±0.33	< 0,05
Rigidity, points	13.5±0.49	12.9±0.38	>0,05
Physical functioning, points	53.1±0.42	61.9±0.36	>0,05
Role performance due to physical condition, points	42.1±0.27	62.4±0.39	< 0,01
Intensity of pain, points	52.0±0.61	61.3±0.42	>0,05
General health, points	47.5±0.49	61.6±0.56	>0,05
Vital activity, points	28.5±0.38	64.8±0.48	< 0,001
Social functioning, points	22.9±0.30	69.7±0.52	< 0,001
Role functioning due to emotional state, points	24.5±0.25	63.8±0.32	< 0,001
Mental health, points	26.1±0.19	66.3±0.26	< 0,001
Self-distancing, points	31.8±0.28	30.3±0.23	>0,05
Self-transcendence, points	72.5±0.46	69.2±0.42	>0,05
Freedom, points	44.3±0.60	48.0±0.46	>0,05
Responsibility, points	62.4±0.33	38.2±0.49	<0,01
Personality, points	91.5±0.30	101.9±0.27	>0,05
Existentiality, points	93.6±0.57	82.4±0.52	>0,05

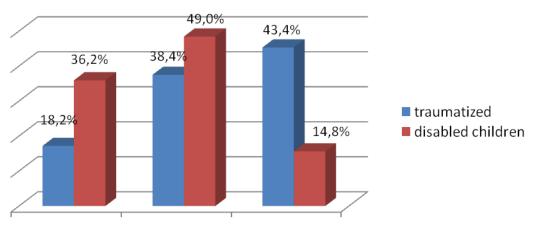
#### Table1: Parameters of adaptive abilities of the individual surveyed

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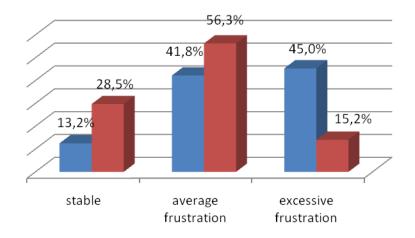


It becomes clear that the development of hemi paresis is for a person a triggering of anxiety, frustration and aggressiveness. Despite the fact that hemi paresis appeared in subjects more than 3 years ago, they are stronger than the persons of the control group, they feel negative about their life, as well as feelings of resentment for their entire life. Also, most subjects from the experimental group easily fall into despair, do not feel self-confidence, they are hypochondriac and need psychological support. They are more likely than people in the control group to have distrust of others, a feeling of irritation, a sense of unrealized life plans and the impossibility of achieving previously set goals.

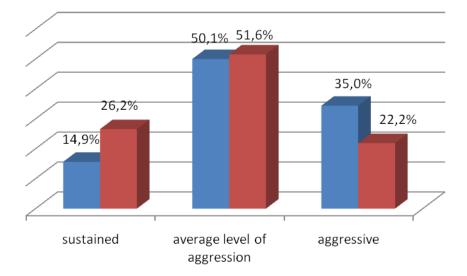
In the control, 36.2% of the subjects were characterized as not alarming. In the experimental group, there were only 18.2%, while 43.4% were alarming and suspicious. It becomes clear that a severe hemorrhagic stroke is a serious cause of the development of anxiety, which largely hinders their successful adaptation. This is aggravated by a violation of blood circulation in their brain due to changes in various blood parameters [22, 23]. This phenomenon is very typical for various pathologies [24, 25] and individual age stages [26, 27].



not worrving anxietvaverage verv anxious







# Figure 2: Percentage distribution of subjects in terms of the severity of their anxiety, frustration and aggressiveness.

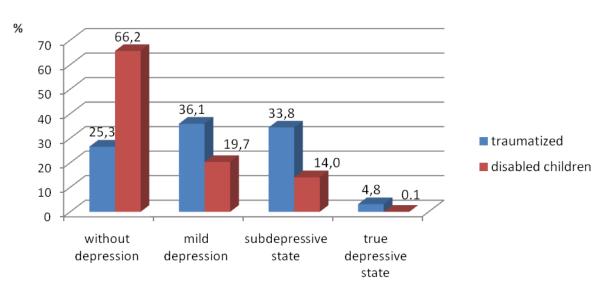
High frustration, which prevents the successful adaptation of disabled people with hemi paresis after a stroke, was noted in 45, 0% of cases. At the same time, a high degree of frustration in the control was recorded only in 15, 2%. Among disabled people who have suffered stroke, only 14, 9% of the subjects are characterized as aged, and 35, 0% are aggressive, feeling excessive resentment and irritation, which is much higher than the level of control.

The main differences between the two groups of subjects were obtained from the indicators of their mental health (Table 1). The emotional state of the majority of disabled children, even with significant limitations of health, is characterized by greater well-being, compared to those who suffered stroke and became disabled at a conscious age. Most people in the experimental group feel tired, emotionally depleted, while the respondents of the control group, on the contrary, felt full of energy and energy. The greatest differences between the two study groups were recorded in terms of social activity indicators of respondents. So, if the majority of disabled children, despite significant limitations to their health, led an active social life, constantly expanding their social contacts, most of the disabled with a late defeat of the musculoskeletal system, on the contrary, limited their social contacts and avoided communication. They focused their attention on medical rehabilitation and on their physical sensations. It becomes clear that emotional experiences and excessive anxiety in the persons of the experimental group of disabled children, the average indicators of mental health are in the range of average values, and in the group of people with disabilities with late affection of the musculoskeletal system - in the range of low values.

In assessing the severity of depression in subjects revealed significant differences between groups (Figure 3). It was found out that 66, 2% of the subjects in the control group and 25, 3% in the experimental group had no signs of depression. At the same time, among those subjects who suffered stroke and became disabled as a result of him,4,8% have a pronounced depressive state, 33,8% had a sub depressive state, and 36,7% had mild depression of situational or neurotic genesis.

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#### Figure 3: Percentage distribution of subjects in terms of severity of depressive states.

In the group of disabled people with a hemi paresis after a stroke, a third of respondents (32, 4%) are characterized by a high level of self-distancing, combined with insufficient self-transcendence. In the group of disabled children, despite the fact that high scores on the scales "self-distancing" and "self-transcendence" are recorded in a small number of respondents, the majority (65, 5%) are characterized by a harmonious combination of the ability to distance themselves from life and the ability to perceive and accept yourself with all your needs.

It becomes clear that the relatively low level of self-distraction and self-transcendence is the result of years of deprivation of childhood disabilities. Personality, which has suffered a serious physical trauma and became due to it as an invalid, has other features of development. The non-harmonic combination of the level of development of the ability to self-distancing and self-transcendence is more likely to indicate the situational state of the respondents: either about their compensated fear, or about a temporary sense of confusion and defenselessness.

In the experimental group were respondents with a high degree of willingness to make decisions and to find adequate ways of acting, as well as individuals with a rather low level of self-confidence and in their own strengths. It is noteworthy that among respondents with high self-transcendence rates, 26, 6% are characterized by a low level of development of internal freedom. This may indicate their depressive states and reactions to a complex life situation, due to lack of power and excessive immersion in their inner world [28, 29]. Such subjects made up 7, 9% in the experimental group.

Significantly significant differences between the two groups were observed in the indicators of responsibility, with an average score for this indicator of existential fulfillment higher in the group of people with disabilities with late development of hemi paresis disabled group of childhood.

In the group of disabled children, the majority of respondents have an understated level of development of the ability to translate life plans based on personal values and personal interests. They do not feel their personal involvement in their own lives, which, as a rule, goes on in its own way and is not amenable to planning and own will. In the group of people with disabilities with hemi paresis, on the contrary, many respondents are characterized by an increased desire to start life anew, to rethink their values.

27, 0% of cases in the experimental group combination of responsibility indicators and low level of internal freedom development testify that such subjects are close to the state of depression [30]. On the one hand, they followed the convictions that in a difficult life situation it is necessary to exercise their will power (the demand of the society and stereotypes of perception), and, on the other hand, they lost their inner



freedom, were disoriented and no longer believed in personal values. At the same time, the higher scores on the "responsibility" scale recorded in the group of people with disabilities with late affection of the musculoskeletal system testify to the rather high potential of the majority of the examined experimental group and, at the same time, the worsening of their emotional state inhibiting their adaptation [31,32]. In this regard, one might think that among disabled people with a hemi paresis, the majority are people who have internal resources and willpower. At the same time, their manifestations are inhibited due to the development of neurotic disorders and self-doubt, arising from unexpected life circumstances and feelings of fear of them.

#### CONCLUSION

Extensive hemorrhagic stroke, which led to disability, can become a trigger for the development of anxiety, frustration and aggressiveness for a person. Such people fall into despair, do not feel self-confidence, they are hypochondriac and need psychological support. They are more likely than children with disabilities to distrust others, feelings of irritation and resentment, a sense of unrealized life plans and the impossibility of achieving previously set goals. The majority of disabled people with hemi paresis due to stroke limit their social contacts and leave communication, while the bulk of disabled children are active social lives, constantly expanding their social contacts. The reason for this behavior with late disability is the feeling of being useless, emotional experiences and excessive anxiety. People with disabilities with a hemi paresis are marked by an increased desire to start life anew and rethink their values. In this they are very different from those with childhood disabilities, most of whom have a low level of ability to translate life plans based on personal values and personal interests. Among disabled people with a hemi paresis, the majority are people who have internal resources and willpower. Their manifestations are inhibited by the development of neurotic disorders and self-doubt, arising from unexpected life circumstances and feelings of fear of them.

#### REFERENCES

- [1] ZavalishinaSYu. (2013) State of the system in neonatal calves in homeostasis with iron deficiency. Russian Agricultural Sciences.3: 43-46.
- [2] ZavalishinaSYu. (2012) Activity of a vascular homeostasis at calfs of a dairy food. Russian Agricultural Sciences.4: 49-51.
- [3] VatnikovYuA, ZavalishinaSYu, Kulikov EV, Vilkovysky IF, Nikishov AA, Drukovsky SG, Krotova EA, Khomenets NG, Bolshakova MV. (2017) Correctional abilities of regular muscle activity in relation to erythrocytes' microrheological features of rats with experimentally developed hypertension.BaliMedicalJournal. 6(3): 449-456. doi:10.15562/bmj.v6i3.586
- [4] ZavalishinaSYu, VatnikovYuA, Kulikov EV, Yagnikov SA, Karamyan AS, Sturov NV, Byakhova VM, Kochneva MV, Petryaeva AV. (2017) Diagnostics of erythrocytes' microrheological features and early abnormalities of rats in the model of experimental hypertension development. BaliMedicalJournal. 6(3): 470-475. doi:10.15562/bmj.v6i3.589
- [5] VatnikovYuA, ZavalishinaSYu, Pliushchikov VG, Kuznetsov VI, Seleznev SB, Kubatbekov TS, Rystsova EO, Parshina VI. (2017) Early-changes diagnostics of erythrocytes microrheological features in the model of dyslipidemia development in rats at the late stages of ontogenesis. Bali Medical Journal. 6(1): 216-222.doi: 10.15562/bmj.v6i1.483
- [6] Bikbulatova AA.(2018) The Impact of Daily Wearing of Medicinal-Prophylactic Clothes on The Evidence of Clinical Manifestations of Osteochondrosis Of The 2nd Degree and Platelet Activity in Persons Of The Second Mature Age. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 9(1):677-683.
- [7] Skoryatina IA, ZavalishinaSYu. (2017) Ability to aggregation of basic regular blood elements of patients with hypertension anddyslipidemia receiving non-medication andsimvastatin.BaliMedicalJournal. 6(3): 514-520.doi:10.15562/bmj.v6i3.553
- [8] Kotova OV, ZavalishinaSYu, Makurina ON, KipermanYaV, Savchenko AP, Skoblikova TV, Skripleva EV, Zacepin VI, Skriplev AV, AndreevaVYu. (2017) Impact estimation of long regular exercise on homeostasis and blood rheological features of patients with incipient hypertension.BaliMedicalJournal. 6(3): 514-520. doi:10.15562/bmj.v6i3.552
- [9] Erdine S, Arslan E. (2013) Monitoring treatment adherence in hypertension. CurrHypertens Rep. 15: 269-272.
- [10] Bassin FV (2003) On the strength of the "I" and psychological defense. Self-consciousness and protective mechanisms of personality: reader. Samara, 224.

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- [11] Berezin FB.(1988) Mental and psychophysiological adaptation of man.Leningrad: Nauka, 326.
- [12] Berezina TN (2013) Reserve the possibilities of man. Moscow: Kogito-Center, 112.
- [13] Sokolova ET, Dorozhevets AN (1985) The study of the image of the body in foreign psychology. Bulletin of Moscow University. Series 14.Psychology 4 : 39-49.
- [14] ZavalishinaSYu, Nagibina EV. (2012) Dynamics of microrheology characteristics of erythrocyte in children 7-8 years with scoliosis with therapeutic physical training and massage. Technologies of Living Systems.9 (4): 29-34.
- [15] ZavalishinaSYu. (2012) Hemostatic activity of a vascular wall at newborn calfs. Russian Agricultural Sciences. 1: 37-39.
- [16] Shutova NV, Suvorova OV, Kuassi AP (2015) the influence of the physical self of the self-image on the self-relationship of the personality that is being formed. Modern high technology 12-1: 169-174.
- [17] ZavalishinaSYu. (2012) Platelet activity in newborn calves with iron deficiency anemia.Veterinariya. 2: 51-52.
- [18] Alboin LM.(1987) Psychological mechanisms of emotional stability of a person. Kazan: Publishing house of Kazan. University, 262.
- [19] Alexander F.(2014) Psychosomatic medicine. Principles and applications. Moscow: Institute for General Humanitarian Research, 320.
- [20] Ananyev BG. (1980) Selected psychological works. Moscow: Pedagogika, 1: 232.
- [21] Velichkovsky BB, Marin MI.(2007) Complex diagnostics of individual resistance to stress within the framework of the model "state - a stable feature." Bulletin of the Moscow State University. Series 14. Psychology. 2:34-46.
- [22] ZavalishinaSYu.(2012)ynamicsofhemostasissystematnewborncalveswithirondeficiencybyuseferroglucina ndglicopin. Zootekhniya. 7 : 14-16.
- [23] ZavalishinaSYu.(2012) vascular homeostasis at calves in milk-and-vegetable phase of feeding. Zootekhniya.2:21.
- [24] ZavalishinaSYu. (2011) Functional condition of system of a homeostasis at newborn calves.Veterinariya. 6:42-45.
- [25] Shibutani T (2000) I-concept. Psychology of self-consciousness. Ed. D.Ya. Raygorodsky. Samara: BAHRAH, 245-269.
- [26] Bykova EB. (2003) the image of the future in a picture of the world and I-concept of the person: the dissertation of the candidate of psychological sciences. St. Petersburg, 211.
- [27] ZavalishinaSYu. (2011) Coagulation activity of plasma of blood at calves of a vegetative feeding. Veterinariya. 4 : 48-49.
- [28] ZavalishinaSYu. (2011) Fibrinolysis blood activity at calves in the first year of life. Zootekhniya. 2 : 29-31.
- [29] ZavalishinaSYu. (2010) Anticoagulative and fibrinolitic activity of plasma of blood at calves.Veterinariya. 11:41-43.
- [30] Hansen VA. (1984) System descriptions in psychology. Leningrad: LeningradStateUniversity, 175.
- [31] Glagoleva TI. (2017) Physiological features of vascular control over aggregation processes in the blood of repair heifers on the growth. Zootekniya. 5 : 14-16.
- [32] Glagoleva TI. (2015) vascular disaggregation control of major blood elements at calves on lactovegetable feeding. Zootekniya. 5 : 22-24.