

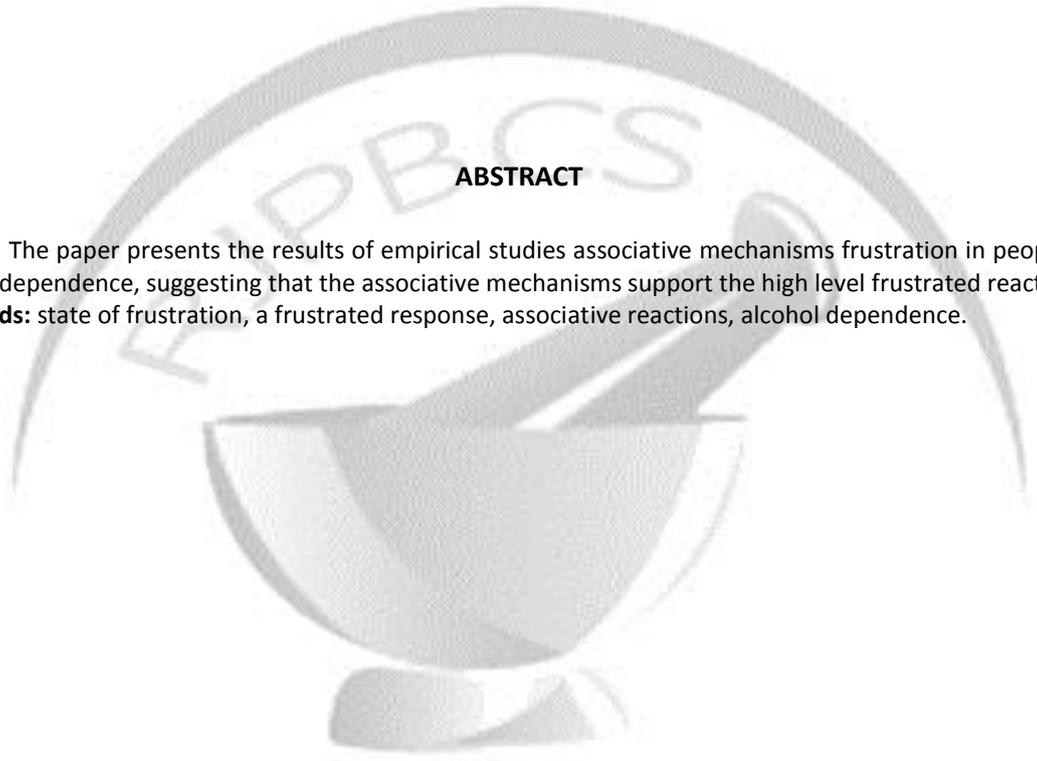


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## Associative Mechanisms Frustration with Alcohol Dependence.

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### ABSTRACT

The paper presents the results of empirical studies associative mechanisms frustration in people with alcohol dependence, suggesting that the associative mechanisms support the high level frustrated reactions.

**Keywords:** state of frustration, a frustrated response, associative reactions, alcohol dependence.

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Modern civilization trend is the increase in the prevalence in the population as a chemical (alcohol addiction, drug addiction, tobacco addiction, drug dependence), and non-chemical addiction (gambling, addiction relations, sexual addiction, computer addiction) [4, 5]. Marked quantitative and qualitative changes in the species structure based (an extension of the object-space) and the age structure of the prevalence of addiction [2, 5]. For example, in the Russian population over the past 20 years has decreased the age of onset with 20-21 years to 13-14 years (according to the Russian statistical Yearbook, 1994-2014) [9].

The dependence is adjudged to be in the interdisciplinary field of inter-owls. Different manifestations and forms based study such Sciences as psychology, psychiatry, psychotherapy, genetics, physiology, immunology, endocrinology, neuroscience, psychopharmacology, resuscitation and other areas of scientific knowledge. Conditionally all available approaches to the dependence can be divided into two groups: biological and psychological. Representatives of the biological approach are: L. F. Panchenko, G.V. Morozov, I.P. Anokhin, I.N. Pyatnitskaya, V.M. Presentations, I. Kruk, F., representatives of the psychological approach are: J.. Watson, B. Skinner, A. Bandura, Z. Freud, A. Freud, N. The Mac-Williams, Crystal, D. Winnicot, M. Muller [1,3,6,8,10-14].

The state of dependence occurs in the system of relations of subject-object orientation, activating a frustrated state, originally arising in the moment cannot meet objektorientierung needs, which are then amplify any tension. Associative mechanisms as neuropsychological mechanisms support the state of frustration and intensified.

The phenomenon of alcohol dependence is accepted as a real condition of man and is described as a fixed stable system of relations of subject-object orientation in violation subject relations.

When alcohol dependence of psychoactive substance alters the course of the further associations. Affective state when alcohol dependence are activated by lyrics-stimuli, that is objectschema incentives, and fixation of associative mechanisms on object dependencies, namely alcohol. When alcohol changes the character of manifestation of associative mechanisms, which leads to increased frustration.

The purpose of research is studying associative mechanisms frustration with alcohol dependence.

Object of research is the state of frustration in people with alcohol dependence. Subject of research - associative mechanisms frustration in people with alcohol dependence. Research methods: an empirical methods (observation, conversation), psycho-diagnostic methods (the methods of the "Frustrated tolerance Rosenzweig," the method of "Associative experiment in adapting Nikishina V.B.) [7], statistical methods (the methods of descriptive, comparative and multivariate statistics).

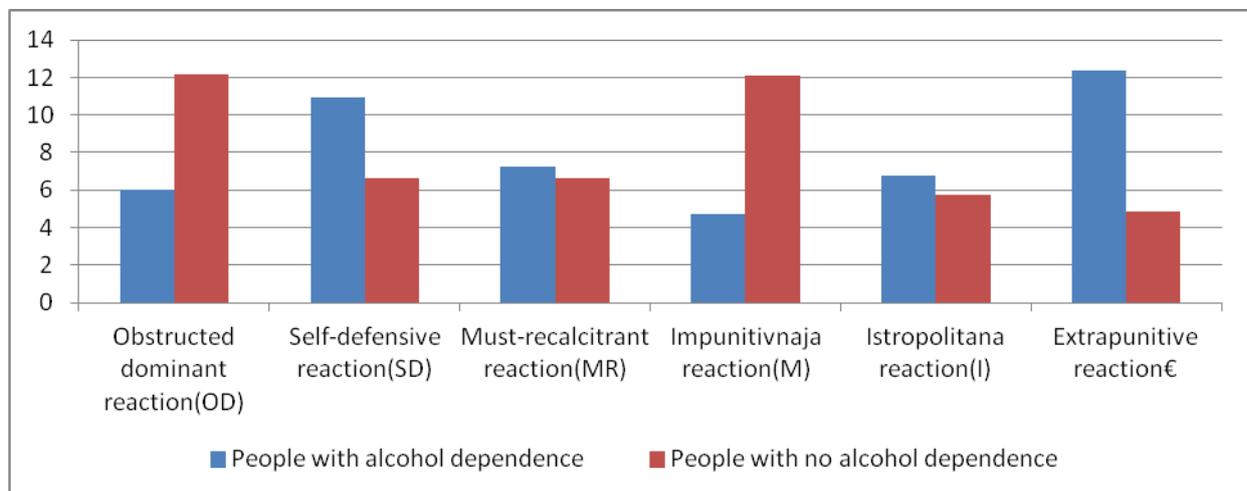
Research subjects with a condition of alcoholic dependence was conducted on the basis of the Kursk regional narcological hospitals. The total volume amounted to 200 people. The experimental group consisted of 100 people (age 22-61 years), located on the 2nd stage (52 persons) and 3 stage (48 people) dependence (with a diagnosis of "dependence

syndrome" (F10.2) in accordance with ICD-10), remission after removing withdrawal symptoms for at least 3 weeks. The control group consisted of the subjects of stateless alcohol - 100 people (aged 22-59 years). The sample was balanced by gender (all subjects men). The study was conducted on the basis of medical institutions, Kursk in the procedure of periodic health examination.

An empirical study associative mechanisms frustration in people with alcohol dependence was carried out in several stages. At the first stage of the study it was necessary to determine whether there are differences in the level of expression of frustration in people with alcohol dependence, located on the second and third stages of addiction. No statistically significant differences in terms of level of expression of a frustrated reactions (obstructed-dominant ( $R=0,25$ ), self-protective ( $R=0,94$ ), recalcitrant ( $p=0.37$ ), impunitivnaja ( $p=0.48$ ), interpolating ( $p=0,17$ ) and extrapunitive ( $p=0,99$ ) acted as the basis for comparison of the total sample of subjects with alcohol dependence and subjects without dependencies.

The study of types frustrating reactions in people with alcohol dependence revealed the predominance of self-type reactions ( $R\pm\sigma=10,95\pm2,87$ ), manifested in the desire to protect himself, decrying or blaming someone else, and extrapunitive reactions in orientation characterized by the conviction external causes frustration and manifested in assigning responsibility for allowing this situation to other people (Fig. 1).

**Figure 1: The histogram of the average level of severity frustrating reactions in people with alcohol dependence.**



\*- the significance of the differences

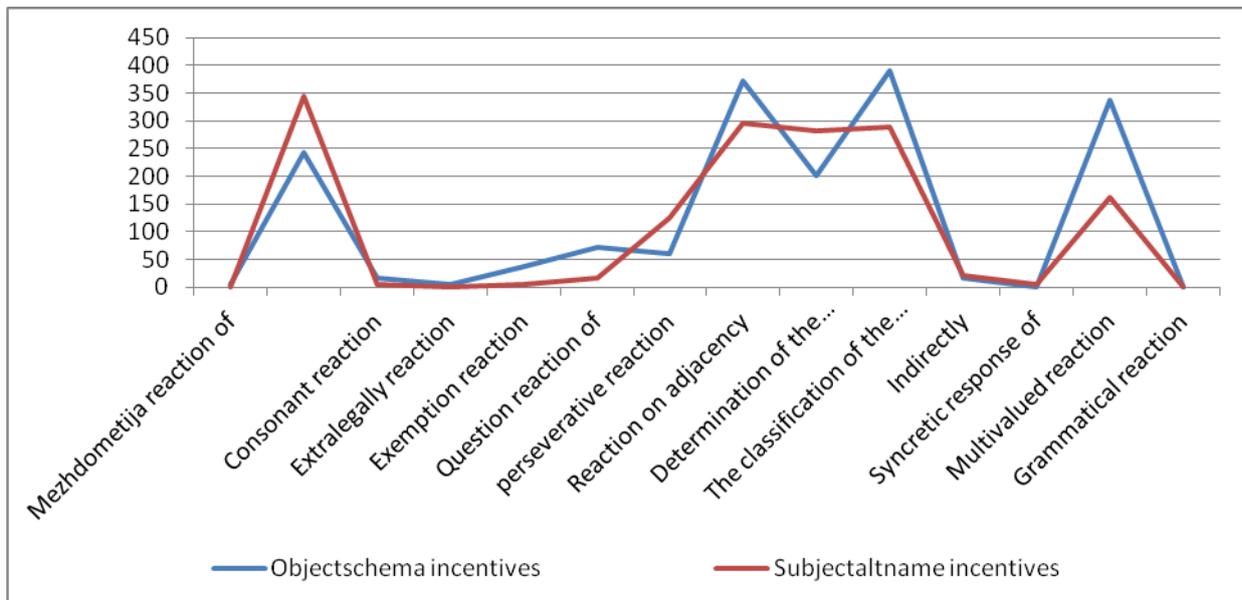
People with no alcohol dependence predominant obstructed-dominant type ( $p\pm\sigma=12,17\pm2,09$ ) and impunitivnaja direction frustrated reaction ( $R\pm\sigma=12,09\pm 2.55$ ). Frustration seen as a benefit or described as an obstacle, not having any real significance, and the frustrating situation is dealt with subjects as insignificant, without fault.

The results showed a predominance of people with alcohol dependence prevalence of self and extrapunitive reactions. As the progression of alcohol dependence is strengthening frustrating reactions.

The study associative mechanisms in people with alcohol dependence and lack of alcohol dependence was carried out by constructing profiles associative reactions through frequency analysis and the procedure of summing frequencies on object-significant incentives and irrelevant stimuli.

Profile associative reactions in people with alcohol dependence objectschema incentives generated by the criterion of decreasing frequency of occurrence associative reactions: classification of reactions, adjacency, multivalued, ahollinger, determination, question, perseverating, resignation, consonant, indirect, minometnyh, extralegally, syncretic and grammar. Predominant ehrlichiosis reactions, determination of reaction, reaction on adjacency, the classification of the reaction and ambiguous reaction. The profile of associative reactions subjectalname incentives with alcohol dependence was revealed the predominance of the following associative reactions: ehrlichiosis reactions, determination of reaction, reaction on adjacency, the classification of the reaction (Fig. 2).

**Figure 2: Profiles associative reactions to objectschema and subjectalname incentives in people with alcohol dependence**



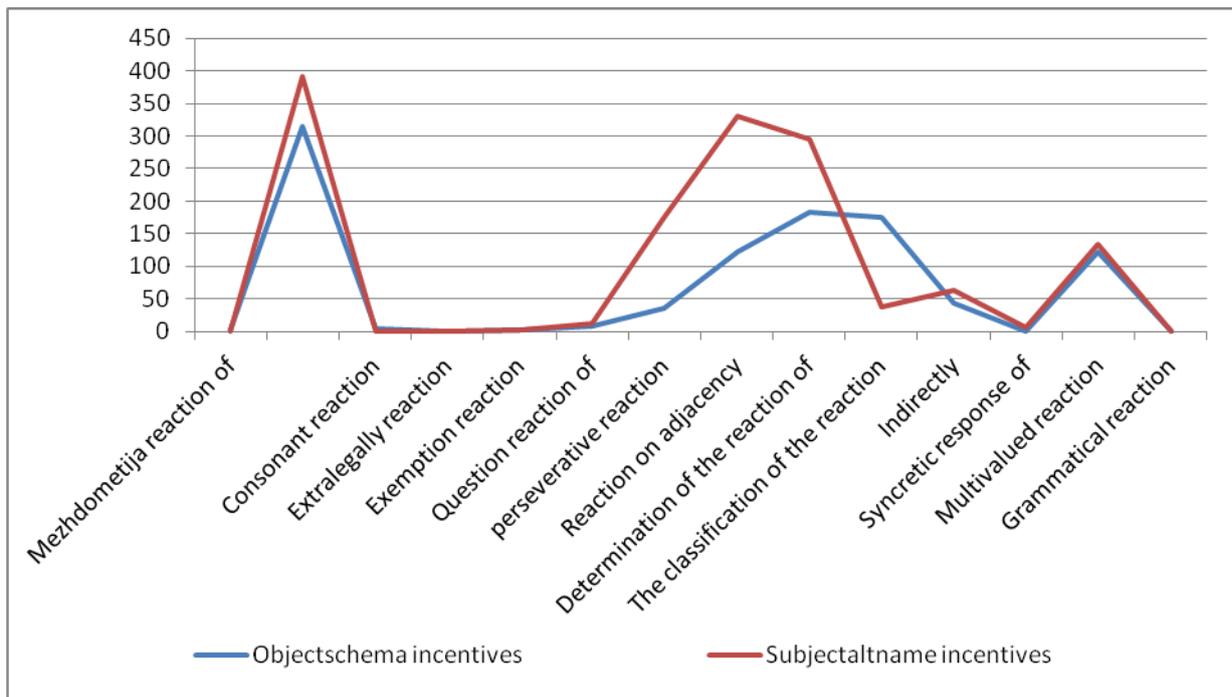
Profile associative reactions of people with no alcohol on objectschema incentives characterized by the predominance of ahollinger reactions (Fig. 3).

The profile of associative reactions of people with no alcohol on subjectalname incentives are prevailing determination of reaction, ehrlichiosis reaction, the classification of the reaction and the reaction in adjacency.

The evaluation of significance of differences frequency pokazateli associative reactions in people with alcohol dependence and lack of dependence on objectschemas and subjectalname incentives, the following results are obtained. The indicator objectschema incentives and subjectalname incentives in people with alcohol dependence have been revealed statistically significant differences ( $p=0.001$ ). The indicator objectschema incentives and subjectalname incentives in people with no alcohol dependence statistically

significant differences were not found ( $R=0,55$ ). The indicator objectschema incentives in alcohol dependent and lack of dependencies were statistically significant differences ( $p=0,0007$ ) at a high level of statistical significance. The indicator subjectaltname incentives in alcohol dependent and no dependence statistically significant differences were found ( $R=0,23$ ). The obtained results allow to conclude that as the progression of alcohol dependence affective States are activated by lyrics-stimuli (objectschema incentives), and is committed associative mechanisms on object dependencies, namely alcohol. This trend in people with no alcohol dependence was not revealed.

**Figure 3: Profiles associative reactions to objectschema and subjectaltname incentives in people with no alcohol dependence**



Assessment of the interlinkages frustrating reactions and associative mechanisms in people with alcohol dependence was carried out using r-criterion the Spearman's rank correlation.

In the result of the correlation analysis identified the following significant relationship (table 1).

The study of this system of relations frustrating reactions and associative mechanisms in people with alcohol dependence was established that extrapunitive and interpolative reaction supported ehrlichiosis, multivalued associative reactions and associative reactions in adjacency.

The study of this system of relations frustration and associative reactions to people with no alcohol dependence were revealed significant correlation between the state of frustration and associative mechanisms in people with no alcohol dependence. Obtained statistically significant relationship between obstructed dominant reaction and question reaction ( $-0,24^*$ ); - defensive reaction and question reaction ( $0,23^*$ ); interpolative reaction

and indirect response (-0,24\*); extrapunitive reaction and indirect response (0,22\*); and extrapunitive reaction and syncretic reaction (0,21\*) (table 2).

**Table 1: The values of the correlation coefficient between the state of frustration and associative responses in subjects with alcohol dependence (Spearman, p=0.05).**

Associative experiment / Status frustration	ED	OD	NP	E	I	M
Mezhdometija reaction of	0,07	0,03	0,17	-0,01	0,09	-0,12
Ehrlichiosis reaction	0,07	0,04	-0,00	<u>0,27*</u>	<u>-0,28*</u>	-0,11
Consonant reaction	0,06	-0,06	-0,09	-0,19	0,17	0,12
Extralegally reaction	-0,16	0,12	-0,01	0,05	0,09	-0,15
Exemption reaction	-0,05	-0,00	0,00	0,02	-0,07	0,03
Question reaction of	0,03	-0,05	0,06	-0,08	-0,04	-0,00
Perseverative reaction	-0,03	0,03	0,02	0,12	0,05	-0,16
Reaction on adjacency	-0,00	0,02	-0,09	<u>-0,24*</u>	<u>0,27*</u>	0,07
Determination of the reaction of	0,01	-0,07	-0,00	-0,08	0,11	0,14
The classification of the reaction	0,04	-0,07	-0,04	-0,00	0,08	-0,00
Indirectly	-0,03	-0,03	0,01	0,00	0,00	0,00
Syncretic response of	0,13	-0,12	-0,07	0,01	-0,00	0,00
Multivalued reaction	-0,03	-0,03	-0,02	<u>-0,19*</u>	<u>0,22*</u>	0,00
Grammatical reaction	0,00	0,00	0,00	0,00	0,00	0,00

\*-statistically significant relationship

Legend: ED - obstructed-dominant reaction; OD - self-defensive reaction; NP - need-recalcitrant reaction; E - extrapunitive reaction; I - infrapunasauna reaction; M - impunitivnaja reaction.

**Table 2: The values of the correlation coefficient between the state of frustration and associative mechanisms in subjects with no alcohol dependence (Spearman, p=0.05).**

Associative experiment / Status frustration	ED	OD	NP	E	I	M
Mezhdometija reaction of	0,00	0,00	0,00	0,00	0,00	0,00
Ehrlichiosis reaction	-0,00	0,07	-0,06	-0,12	0,09	0,10
Consonant reaction	0,03	-0,05	-0,08	0,09	-0,10	0,02
Extralegally reaction	0,00	0,00	0,00	0,00	0,00	0,00
Exemption reaction	0,00	0,00	0,00	0,00	0,00	0,00
Question reaction of	<u>0,23*</u>	<u>-0,24*</u>	-0,05	0,14	-0,11	0,04
Erseverative reaction	0,04	-0,13	0,02	-0,00	0,03	0,09
Reaction on adjacency	-0,09	0,04	0,07	0,03	-0,01	-0,10
Determination of the reaction of	0,01	-0,08	0,16	-0,17	0,07	0,02
The classification of the reaction	-0,00	-0,01	0,12	0,03	0,02	-0,06
Indirectly	-0,00	-0,12	0,04	<u>0,22*</u>	<u>-0,24*</u>	-0,11
Syncretic response of	0,00	0,13	-0,18	<u>0,21*</u>	-0,10	-0,06
Multivalued reaction	-0,03	0,10	-0,01	0,04	-0,01	-0,13
Grammatical reaction	0,00	0,00	0,00	0,00	0,00	0,00

\*-statistically significant relationship

Legend: ED - obstructed-dominant reaction; OD - self-defensive reaction; NP - need-recalcitrant reaction; E - extrapunitive reaction; I - infrapunasauna reaction; M - impunitivnaja reaction

The obtained results allow us to conclude the following: people with no alcohol dependence obstructed dominant and self-frustrated reaction ensured question associations; indirect associations support extrapunitive and interpolative frustrated reaction.

The study associative mechanisms frustration in people with alcohol dependence have been obtained results indicate that the influence of a psychoactive substance changes the course of associations. Affective state when alcohol dependence are activated upon presentation of words-stimuli (objectschema incentives) and fixation of associative mechanisms on object dependencies, namely alcohol. Statistically significant correlation between the state of frustration and associative reactions suggest that associative mechanisms support the high level frustrated reactions in people with alcohol dependence.

### REFERENCES

- [1] Anokhin IP. *Addiction Issues* 1995;2:27-29
- [2] Azarov EA. *Cult Sci Integr* 2010;11(3):139-142.
- [3] VM Blaher, I Kruk. *Clinical pathopsychology: a Guide for doctors and clinical psychologists. The sides.-M: Publishing house of the Moscow Psihologo - social Institute; Voronezh: Publishing house NGO, MODEC", 2002.*
- [4] Egorov A, Aleksin DS, N Petrova. *Medicine* 2012;1:29-40.
- [5] Maksimenko SD, Maksimenko HP, Nikishin VB. have been, Petrash E.A.,
- [6] Kuznetsov AA. Associative-dissociative mechanisms temporal perspective of an individual with alcoholic dependence. *Kursk scientific-practical journal "People & health"*p.-85-91
- [7] GV Morozov. *Medicine* 2003;432:215
- [8] Nikishin VB. *Bulletin of the University (State University of management).* – 2010;9: 67-71.
- [9] Pyatnitskaya IN. *Medicine* 1994:544.
- [10] *Russian statistical Yearbook. 2004-2012: Stat. collection / Rosstat. - M, 2004-2012.*
- [11] Balgo V. *Ann Ig* 2006;18(2):147-153
- [12] Bandura A. *Handbook of moral behavior and development* 1991A;1:45-103.
- [13] Jellinek E. *The diseases concept of alcoholism/ E. Jellinek.-N-Y,1960, 246 c.*
- [14] Juo Sun-Hang H. the Possible linkage of alcoholism, monoamine oxidase activity and P300 amplitude to markers on chromosome 12q24: *Pap. Genet/ H. Juo Sun-Hang, E.W. Pugh, A. Baffoe-Bonnie et al.// Anal. Workshop 11 "Anal. Genet. And Environ, Factors Common Diseases",Arcachon, Sept. 8-10,2008.//Genet Epidemiol. 1999; 17(Suppl 1):193-198.*
- [15] Rotter JB. *Social Learning And Clinical Psychology, 1954.*