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**SPECIFICITY OF THE STRUCTURE OF THE INTELLECT OF
SOCIALLY SUCCESSFUL PEOPLE**

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Abstract

The article reveals a research attempt to identify the structural components of intellect that accompany social success (high administrative and managerial social status). Approaches to understanding social success are considered, criteria of social success are analyzed and highlighted. As one of the objective criteria for the study is taken social status.

Intellect is presented as a potential factor of social success by criteria of high social status. An analysis is given in the form of a historical reference of studies of the role of the intellect in the professional successes of the individual on the examples of the work of American, European, and Russian psychologists.

Tendencies in relation to certain "critical points of the intellect" that are more pronounced among highly ranked specialists are identified. These include, first of all, the flexibility of thinking. This aspect seems to be the most perspective for further researches.

Due to the fact that modern empirical data on the COT method do not fully reflect the ability of respondents to achieve social success, standardization of the COT method (adaptation of the Vanderlik test) was carried out.

The article introduces new norms of the method for sex and age features. We believe that the proposed norms will more reliably record the level of the general abilities of the respondents.

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1. Introduction

The fact that there are socially successful and socially unsuccessful people in society is indisputable. What are the criteria for measuring social success? Dictionaries define "success" as fortune in achieving something, public recognition, good results in work and study. (Ozhegov, 1999, p.739). That is, as well as school progress, social success can be of different levels. Here can be "C-students", "B-students", "A-students" and "medalists" in the social plan.

Studies of the problem of success are found in sociological studies and in literature relating to management, the psychology of business and business culture, where the notion of success as a purely economic concept is formed.

The problem of success has a long history. Special attention to this phenomenon was paid by American philosophers-pragmatists W. James, J. Dewey, S. Hook, J. Baldwin. (James, 1991; Dewey, 2002; Hook, 1955; Baldwin, 2011). Triad human - activity - success - a cross-cutting topic, in works of classics of pragmatism. For example, J. Dewey connected success to the notion of happiness, as the central idea of morality. "Happiness," he writes, "is based only on success, but success means achieving the goal, going forward, moving forward." (Tatarkevich, 1981, p.179).

The mention of success is also found from W. James, who connected it with two personal variables - self-esteem and claims in his famous formula: self-respect = success / claim. (Muzdybaev, 2001)

Nowadays there are a lot of researches on the problem of success, but the problem of social success of the individual remains a deficit area of domestic psychological science.

The task of reviewing the main approaches to the problems of success in psychology is complicated by the absence of direct and simple theories that regard it as a central or basic construct. Nevertheless, in the system of scientific psychology there are categories applicable to the explanation of cognitive, affective and behavioral manifestations of a person in the context of the phenomenon of success that different psychological schools interpret in their own way.

From the point of view of psychoanalysis, the explanation of an individual's success in a particular field of activity should be searched in the dynamic manifestations of "psychic energy" moving from the original instinctive object-election. In psychoanalysis, "success" is a homeostatic equilibrium in satisfying instinctual needs (Hjell, 2001).

E. Fromm defined the criteria of success as the existence of the principle of private initiative in the system of values of the individual and, accordingly, the ability of some kind of market type of human to "sell" himself to society (Fromm, 1993).

The position of Adler is different regarding to the determinant of social success. First, according to Adler people are originally social creatures and put the common good above selfish interests, their life style is predominantly social in orientation. The phenomenon of success is directly connected with one of A. Adler's fundamental ideas - the idea of fictitious finalism. The ultimate goals of life create a stimulating basis for human activity. This final goal can be a fiction, that is, an unachievable ideal, but, nevertheless, it is a real stimulus of human life activity. Another concept of Adler is closely connected with the notion of success - the aspiration to excellence. This desire leads the person to ever higher stages of development, to perfection, while a healthy desire for excellence has a social context. This is

manifested in the social interest, which consists of helping society to achieve the goal - society's perfection. Only that person will feel successful, which acts in resonance with society. (Hjell, 2001).

According to the theory of social learning A. Bandura, the child can be formed patterns of successful behavior through vicarious training, that is, through imitation of behavior leading to success. His theory is relevant in the context of understanding the nature and functions of success. It was A. Bandura that introduced the concept of the effectiveness of personality, which he described as a set of experiences of self-esteem, self-respect and competence in solving life problems. People who have high personal effectiveness believe that they are able to cope with adverse events and circumstances of life. They expect from themselves the ability to overcome obstacles, they themselves look for tests, complicate their tasks and, in their pursuit of success, maintain a high level of self-reliance (Koverzneva, 2010).

The methodological basis for the concept of success, from the point of view of A. Maslow, a representative of the humanistic direction of psychology, is self-actualization - the most complete disclosure of abilities and realization of the potential of a person. Such an active desire of a person to reveal his abilities is the highest need of human. (Maslow, 1999).

In Kurt Levine's school, success was studied in the context of the problem of goal-setting of the individual, and more specifically in connection with the study of the level of claims. (Levin, 2000).

The role of success and failure in a particular activity, the dependence of the dynamics of activity on the presence / absence of success, the relationship of success with the claim, the difficulty of the tasks, the self-esteem (the "self" level of the personality) were investigated in the experimental studies of the students of K. Levin - F. Hoppe, M. Yuknat. (Levin, 2000).

Success is associated by the classics of psychology with the activity of personality, subjectivity and mediated by the capabilities of the individual. According to J. Atkinson, the motive of achievement is a general disposition of the personality latent in each subject (Ilyin, 2003).

In the domestic psychology, the problem of success and social success has been poorly developed. For example, the theory of activity considers the concept of "success of activity" rather than the phenomenon of success, and the concept of K.A. Abulkhanova-Slavskaya represents success in the context of such a concept as the subjectivity of the individual, an active life position (Abulkhanova, 1999).

V.A. Labunskaya defines success as "a positive result of the subject's activity in achieving significant goals for him, reflecting the social orientations of society. Success is a certain "form of self-realization" of a person which "provides his self-development and presumes an assessment by society" in the form of "recognition and approval" (Labunskaya, 1999).

Dementy L.I. believes that "success (or failure) accompanies "any activity of a person, it "pervades" all kinds of social activity, as it is connected with fundamental social needs. Success is a multifaceted and multifactorial phenomenon: it includes the resources of the individual (its abilities, capabilities, creativity, motivational orientation, self-esteem, aspirations) and its social orientations " (Dementy, 2005).

We define success as the absence of recognized by society achievements in the leading activities for the current age of the individual (Makarevskaya, 2006).

In this way, success is associated with objective characteristics (good luck, recognition of society, good results) and subjective characteristics (success that is perceived by the individual as meaningful).

In this study, emphasis is placed on the social, normative aspect of success, fixing objectively observed effective achievements of a person recognized by society.

The mechanisms of successful activity have been thoroughly studied and presented in the literature in two ways:

1. biologically oriented theories of genius, in which reasons for the success of personality are contained in the organic constitution of a person, his individual biological features. According to this direction, an important role in achieving success is played by intellect as a potential readiness of a person to solve posed tasks with knowledge of the case [directions that study the determinants of the social and professional success of the individual, in which success depends not only on the abilities of the person, but also on the nature of the goal, the desire to work, personal characteristics (W. James, K. Levin, F. Hoppe, M. Yuknat) (Frejger, 2004).

In foreign psychology, a large number of studies have been carried out on the connection between the level of intelligence and success in the professional sphere, predictive validity of the intellect in professions of different levels of complexity (J. Hunter (Hunter, 1986) was established, it has been proved that intelligence tests more objectively record the success rate of labor than expert estimates (Gottfredson, 2003).

E. Hunt, who writes: "The research of psychometric tests in the industry and military industries again and again shows a reliable and socially significant predictive power with respect to success in the workplace <...> Psychometric tests are often the best predictors of success both in school and in professional activities.... The argument, that the behavior standing behind psychometric tests has nothing to do with human competence, is unacceptable " (Hunt, 1978).

Differentiation on success occurs even at the stage of school education, during which school success correlates with the tests of intelligence at about the level of $r = 0.5$ (for example, the test of Raven) (Druzhinin, 2001).

And further in professional activity it can be observed that people with limited cognitive development are being weeded out on the approaches to complex professions.

So, for several decades of application of the test for the selection of Vanderlik staff, data on the intellect of applicants for a variety of positions were collected and standardized. That is, there is a significant difference in the intellect of applicants for different professions. It is believed that the Vanderlik test works well on a sample of highly qualified employees and managers.

Further, the data presented in this article will reflect the intellect according to the integral index of the COT test in the adaptation of V.N. Buzin (the Russian adapted version of the Vanderlik test) (Istratova, 2006).

Since in modern society, the social status is most often determined by the acquired profession, it is clear that data on the intellect of socially highly status people can be interesting. And not only about their level of intelligence, which is already enough researched (Ushakov, 2004; Fokeev, 2003; Baron, 1963).

Longitude of Termen (1921-1981), which shows the significant social achievements, life successes of high-intellectual children is well known. However, in this and subsequent studies it was found that there is no definite and clear feature in the achievements, separated by super-high or simply high intelligence. It has been shown that as the intellect increases, the probability of outstanding achievements increases (Raven, 1997).

In Russia, the same patterns are observed in terms of communication between the intellect and academic achievement, the ability to enter universities and success in work.

However, the movement towards social success is not always determined by the intellect, the structure of society also has significance.

And the principles of personnel movement in the domestic system of personnel management are still far from their final and scientifically-justified formulations.

That is, psychometric meanings of the mind and their connection with social success continue to interest researchers.

Analyzing the dynamics of the intellect level in the domestic sample (N = 204) for fifteen years (from 2003 to 2018), we found statistically significant indicators of its decline (U-Manna-Whitney = 3339.5, p = 0.000). We will illustrate the results obtained by comparing time slice data. However, the world for the denoted 15 years has developed and is developing, discoveries are made, progress in science is obvious, people still achieve social success.

Table 01. Dynamics of the level of intelligence according to the integral indicator of the COT test

Group	2003-2004		2017-2018	
	Average value	Standard deviation	Average value	Standard deviation
Men	23.29	6.43	18.40	5.29
Women	21.85	4.06	19.53	7.34
In the whole group	22.34	4.99	19.10	6.64

Conducting the next section on intelligence among socially highly status people (2017-2018), we also noticed that they do not have such a high medial level of intelligence ($\bar{x}_{sr} = 18.94$, $\sigma = 3.98$), as it was stated in the initial data of E. Wanderlik's test (E.F. Wonderlik, 1939) and is recorded in our previous studies (see Table 1).

2. Problem Statement

On the background of a decrease in the level of intelligence, fixed by standard psychometric methods, the current vital tasks for people remain the same and even become more complicated. In this regard, there are two research problems:

- 1) or psychometric methods have stopped showing the real intellectual capabilities of the subjects because of the loss of data on essential characteristics in the structure of human abilities;
- 2) or the norms of methods have lost relevance and require re-standardization.

Therefore, a hypothesis arose that on the background of a decline in the general level of intelligence, a high social status is achieved by people with a specific structure of abilities.

Maybe high status people use certain abilities to achieve social success? At the same time, we understand that the ways of achieving success are certainly different, and in this article we do not set the task to figure them out.

3. Research Questions

- 3.1. Determine the concept of social success and the criteria for achieving it;
- 3.2. to form a sample in accordance with the criteria of socially-status people;
- 3.3. to diagnose the intellect of highly status respondents;
- 3.4. to determine the specifics of the structure of the intellect of socially statused subjects;
- 3.5. compare the structures of the intellect of socially high-status and low-status respondents;
- 3.6. identify informative components of intelligence, specific to respondents with high social status;
- 3.7. standardize the norms of the COT method.

4. Purpose of the Study

- 4.1. To determine the actual specifics of the structure of the intellect, which allows people to achieve social successes (high social status) on the background of a decline in general intellectual level.
- 4.2. To denote the actual norms of the COT method for sex-age differentiation.

5. Research Methods

As the main research method in our study was used the Russian adaptation of the method of E.F. Wonderlik - (Brief indicative, qualifying test, V.N. Buzin, E.F. Wonderlik).

The study was conducted in 2017-2018. Three groups of subjects were formed:

- 5.1. subjects with high social status (men and women aged from 32 to 59 years who occupy management positions (administration) in the oil and gas company, the state administrative apparatus and in higher education institutions) - 31 people;
- 5.2. "low-status subjects" (men and women aged between 26 and 64 who do not have a permanent place of work, or who are employed in low-level professions and public prestige, besides claiming about subjective dissatisfaction with a professional choice or current job) - 21 human;
- 5.3. subjects who are currently getting a high education, studying in the Master's program or undergraduate programs - at the age of 19 to 30 years - 31 people.

Let us explain two principal points concerning the formation of groups participating in the study. There is a difference in the quantitative composition of the second group, compared to the first and third, this is due to the fact that initially the second group included people with both higher and secondary special education, but later we found that the level of education can speak as a significant additional variable in relation to our study and excluded from the initial sample of the sample 10 subjects who have a level of education below the highest.

We realize that when comparing the data of the third group in relation to the first and second, the age of the subjects may enter as an additional variable. In order to maximally eliminate this effect, in our study, in the formation of the third and the first group, randomization was used as a strategy for selecting groups.

The total sample size was 83 people aged 19 to 64 years.

The study was conducted in two main stages. At the first stage, we analyzed whether there were statistically significant differences in the integral index of intelligence in groups of subjects with different social status.

At the second stage of the study, we analyzed specific features of the structure of the intellect of socially stasused subjects.

6. Findings

So, at the first stage of our study, we compared the integrated intelligence indicators in the groups of our subjects. We represent the descriptive statistics of each of the groups in the form of a table 2 .

Table 02. Comparison of measures of the central tendency of the integral indicator of the COT test in independent samples

Group	Average value	Standarddeviation	Amplitude
Subjects with high social status	18.94	3.98	[13; 28]
Subjects with low social status	20.09	6.39	[9; 34]
Students	21.9	5.94	[12; 33]

So, as can be seen from the table, the smallest average value of the integral indicator of intelligence for a group of subjects with a high social status, but the distribution of indicators in this group is closer, so we can speak about greater uniformity of the trait under study. The biggest amplitude for the integral indicator of intelligence was characteristic of subjects from the "low-status" group.

Let us analyze whether there are statistically significant differences in intelligence between groups. We use for this purpose a nonparametric statistical U-Mann-Whitney criteria.

Results were obtained regarding the existence of differences in the integral intelligence between people studying in institutes and high-status subjects (at $U = 344.5$, $p = 0.05$), but the significance level of the differences allows us to speak of a statistical tendency.

There were no statistically veracious differences in the integral index of intelligence between groups of high-status and low-status respondents.

Let's consider further, whether there are specific features of structure of intelligence depending on the social status.

We represent the average values for individual "critical points of intelligence" in groups of subjects with different social status.

Table 03. Comparison of the "critical points" of the intellect of subjects of different groups

Index	Average value in the group of subjects		
	Subjects with high social status	Subjects with low social status	Students
The ability to generalize and analyze the material	2.7	2.5	2.9
Flexibility of thinking	5.5	4.6	4.7
Emotional components of thinking	0.6	0.4	0.6
Speed and accuracy of perception	1.4	1.3	1.5
The use of language. Literacy	4.1	4.8	5.7
Spatial imagination	1.3	1.7	1.8
Mathematical abilities	5.2	5.4	6.1

So, as can be seen from the table, there are a number of differences in the average indicators for the individual "critical points" of the intellect. Thus, in the group of subjects with a high social status, the indicators of flexibility of thinking are higher. According to such indicators as "language use, literacy" and "mathematical abilities" students transcend the subjects from the two remaining groups.

Table 04. Normalization of the results of the COT method

Standardization group	Average value	Standard deviation
Sex-age groups		
Men 18-45 (30 people)	19.9	5.3
Women 18-45 (47 people)	22.3	7.1
Men 45-74 (17 people)	15.9	4.5
Women 45-74 (28 people)	14.9	5.4
Groups of different professional status		
Managers (31 people)	18.9	4.0
Students (31 people)	21.9	5.9
Unemployed (15 people)	18.3	7.4
Pensioners (30 people)	13.8	4.7

The study revealed statistically significant differences between groups of students and high-status subjects in terms of intelligence characteristics such as, "Use of language, literacy" (at $U = 205.5$, $p = 0.000$), while the level of development of this ability is higher in a group of students.

So, the first part of our assumption did not receive statistically significant reinforcement. The general level of intelligence among high-status people and people of low social status does not differ statistically. In the structure of intelligence, only tendencies to a difference in the parameters of the flexibility of thinking and the use of language were identified. These trends, in our opinion, are worthy a more detailed study in the future.

We will now turn to the second part of our hypothesis regarding the standardization of the norms of the COT method.

We offer for consideration and use the current standardization of the results of the COT technique with the aim of an adequate analysis of the level of intelligence (according to the results of standardization).

7. Conclusion

So, in the above study, an attempt has been made to determine the severity of the specific structural components of the intellect ("critical points") that accompany high social achievements (for example, the high administrative and managerial status).

It is this aspect of the hypothesis that has not been fully confirmed. However, statistical tendencies were identified and they require verification.

We can only say definitely that more than others in the use of language and literacy are advanced not leaders, but students who, due to this verbal component of intellect, significantly increase their integral indicators in the COT test (differences at a high level of statistical significance).

Based on our results, it is likely to expect that precisely due to the flexibility of thinking, high-status leaders successfully solve their job tasks (however, this tendency requires additional verification).

The standardization of the COT test allows us to propose new test standards to use. We will be grateful for the feedback of colleagues who use this technique in their practice.

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