



**Personality characteristics of gifted students of creative speciality**

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**ABSTRACT**

We have studied personality traits of the gifted freshmen students of Department Design and National Arts of Institute of Philology and Intercultural Communication L. Tolstoy, Kazan Federal University. A total of 40 students aged 17-19 participated in the study. We used the following methods: Mini-Mult abridged version of the Minnesota Multiphasic Personality Inventory, the method of assessing the level of neuro-emotional stability, degree of integration of personal properties, the level of individual adaptation to the social environment; Eysenck Personality Questionnaire (EPI) defines extraversion (orientation of the personality to the outside world) and neuroticism (the result of an imbalance of excitation and inhibition - properties underlying temperament); Lüschercolour test measures the psycho-physiological state of a person, reveals the emotional and character logical basis of the personality and characteristics of its current state.

As a result of the EPI test, the number of extroverts in the study group is a little more than a half, and the rest of the examinees are of a mixed type and introverts. The Mini-Mult test showed a high level of the emotional stability of the students. It is associated with reduced sensitivity to the environment with a relatively low social climate sensitivity.

Correlation analysis, that allowed us to study the structure of diagnosed indices, showed that there is a legitimate interdependence of emotional state (determined by means of the Lüschercolour test) and personal qualities (defined with the help of Mini-Mult, EPI test).

The results of this study will enable to complete the elective courses groups most effectively, as well as to distribute creative tasks and to do psychological adaptation training in a more goal-oriented manner.

**Keywords:** Personality traits, Emotional state, Psychology, Gifted freshmen students, Problems of adaptation



## **INTRODUCTION**

The theme of giftedness is extremely relevant nowadays. Dealing with the development of youth creativity, many states and public organizations of the educational system have an aim to reveal the mechanism of giftedness (Heller et al, 2000).

Art is one of the effective tools for imaginative cognition of the surrounding reality. The comprehensive study of the depicted objects, including their spatial-temporal, visual, auditory, etc., allows the full development of artistic skills, all types of thinking. It helps to create aesthetically influenced artistic images, providing the opportunity for creative self-realization of an individual (Gross, 2002; Grobman, 2006; Fedorenko & Potapova, 2014).

The first year at the university is a certain challenge for a freshman. You need to adapt to the new conditions of learning, living, social environment, etc. The problem of adaptation is being considered most often in literature. Adaptation of freshman students to the educational process at the university has been studied by Russian psychologists and educators for a long time. Most of them consider the students' adaptation to the university as a kind of general human adaptation, which is understood on the one hand, as personal adaptation to the external conditions, on the other - as active cooperation of human and the environment (when a person not only adapts to the requirements of the environment, but also affects it, causing its changes) (Aurel, 2013). In another article the authors highlight the problem of an empathic ability of the freshmen getting the bachelor degree in Educational Psychology. The relevance of the selected topic is explained by the necessity of their understanding of the emotional state of people around them, for the purpose of assistance, support and sympathy (Betts & Neihart, 1985).

The successful adaptation process is implementation of the student's communicative potential in the study group, development of their creativity, social intelligence in group activities, an active position in the educational process, establishment of cooperative relationships with teachers and educational support personnel of the university (Well-Being, 2015; Field et al, 1998).

## **METHODS**

We have studied personality traits of the gifted freshman students of fine arts and design department of Kazan federal university. These students have passed the competitive selection, performing a creative task.

The purpose of this study was to reveal the nature of sustainability and the content of interrelations between the indicators of personal characteristics and the emotional state of gifted students. The study involved a group of 40 freshman students aged 17-19. The techniques used: questionnaire Mini-Mult - a shortened version of the MMPI, contains 11 scales, 3 of them –estimated (Burlachuk et al. 1999; Butcher et al, 1989). The first 3 rating scales measure the sincerity of the test, the degree of reliability of the test results and the amount of correction introduced

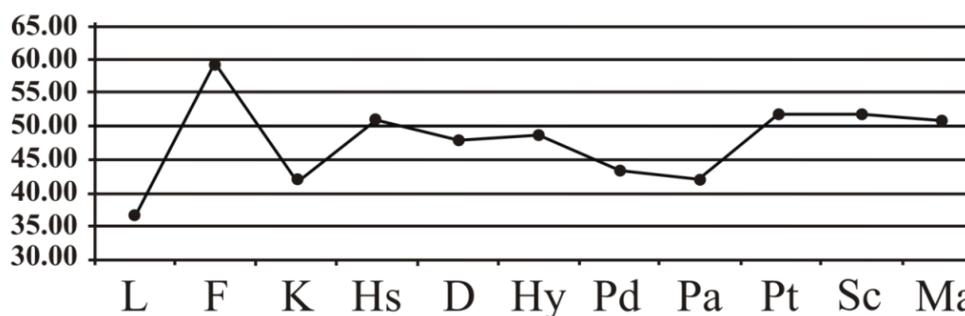


by excessive caution. The remaining 8 are basic scales and evaluate the properties of the individual. The first scale defines if the person belongs to the asthenic-neurotic type. The second scale indicates the propensity of the test subject of sociopathic personality development. Fifth scale in the questionnaire is not used, it should be after the fourth-sixth scale. The sixth scale characterizes the touchiness of the subject, his penchant for affective reactions. The seventh scale is intended to diagnose anxiety and suspiciousness in the person, prone to doubt. The eighth scale determines the degree of emotional detachment, the complexity of social interaction. Ninth scale indicates if the subject belongs to hyperthymic personality type, measures activity and excitability; EPI questionnaire (Eysenck method) defines extraversion (orientation of the personality to the outside world) and neuroticism (the result of the imbalance of excitation and inhibition) - properties underlying temperament. Luscher color test allows to measure psychophysiological state of the subject, his ability to handle stress, his activity and communication skills (Luscher & Scott, 1969; Bazyma, 2005). The quantitative treatment of the data was performed using Applied Microsoft Excel package and STATISTICA 10.0 program (calculation of average data, correlation analysis, differences in reliability criteria).

## **RESULTS AND DISCUSSION**

As a result of EPI test, almost half of the respondents appeared to be extroverts - 52.5% (people who want to be in the spotlight, sociable people who like public speaking), 23.5% mixed type (i.e. as the case may behave both extroverts and introverts like), and 24% introverts (they are characterized by the behavior associated with the comfortable solitude, creativity, inner thoughts and feelings). The average on the scale of neuroticism is 15.2, indicating an increased susceptibility and emotional irritability. At the behavioral level, this is manifested in the increase in the number of somatic complaints (headaches, sleep disorders, addiction to mood swings, inner restlessness, feelings and fears). At the same time, emotional instability, anxiety, low self-esteem can develop. The average personality profile (Mini-Mult test) of the talented freshmen shows that there is no character accentuation. In disharmonious individuals in a state of discomfort F may be at 65 - 75T that reflects emotional instability as shown in Figure 1.

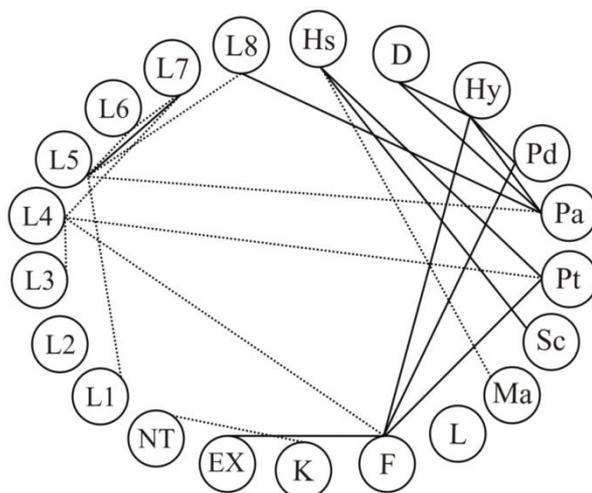
**Fig.1.** The average profile of the personality of a gifted freshman student according to Mini-Mult test (L) Scale of lies, (F) Reliability of scale, (K) Scale of correction, (Hs) Hypochondriasis, (D) Depression, (Hy) Hysteria, (Pd) Psychopathy, (Pa) Being paranoid, (Pt) Psychasthenia, (Sc) Chizoid, (Ma) Hypotension



Low rates on the K scale are commonly observed at elevated and high F and reflect openness, self-criticism. Low K may be associated with decreased self-control in excess of emotional intensity and personal disintegration. Low rates of the 3rd scale (hysteria) (below 50 T) indicates emotional stability, reduced sensitivity to environmental influences with a relatively low responsiveness to the social climate issues, which is reflected in the behaviour of the subject, his less flexible style of interpersonal interaction, the lack of necessary "diplomacy" and consonance mood of the reference group (Zaitseva Lyubov et al, 2018; Viktoriya et al, 2015 ; Fedorenko & Bykova, 2016).

Analyzing the Luscher test results (Table I), we can come to the conclusion that the majority of the students as the first two (indicate the goals and means used to achieve them) chose grey (0 - dividing, separating, releasing from obligations; its first position due to its non-involvement is compensating). Table I. Colour preferences in the gifted students' group

COLOR	POSITION OF THE COLOR IN THE COLOR RANGE OF PREFERENCES							
	1	2	3	4	5	6	7	8
GREY	12	14	4	8	1	4	5	2
BLUE	7	3	5	9	5	0	0	0
GREEN	5	4	17	3	6	4	1	1
RED	2	7	9	10	2	4	4	6
YELLOW	4	7	1	3	11	7	5	1
PURPLE	9	7	3	4	2	10	1	4



BROWN	0	0	1	2	2	7	18	10
BLACK	1	1	0	1	11	4	6	16
TOTAL	40	40	40	40	40	40	40	40

Most chose green as the 3<sup>rd</sup> (2 - symbolizes persistent characteristics, it is a dam, where excitation is accumulated; in this case, the strength of the green is offset by the 3<sup>rd</sup> position). Red is on the 4<sup>th</sup> place (3 - physiological state of energy consumption, life force, nervous hormonal activity, the pursuit of success; red identifies emotionally-vegetative tension when it does not occupy the first three positions). On the 5<sup>th</sup> - yellow and black colors (4 - looseness, relaxation, hope, and expectation of happiness, directed to the future prospects of an increase; but as a compensating color, yellow brings impatience, superficiality, restlessness and 7 - black symbolizes failure, complete renunciation or rejection). Violet is on the 6<sup>th</sup> position (5 - interpreted as a need of escaping from reality, irrational claims, unrealistic demands of life, subjective, individualistic, emotional immaturity). Brown is on the 7<sup>th</sup> place (6 - symbolizes the sensual basis of sensations). The 8<sup>th</sup> position is the most often statistically occurring option for black (7).

If achromatic (0, 7) or complementary colors (5, 6) are on the first positions, the revealed needs are designated as secondary. They are not basic needs, they are just a forced watchdog response to the impossibility of the realization of the primary needs. Figure 2. shows the scheme of the main correlations in the group of gifted students.

Fig. 2. Scheme of the main correlations in the group of gifted students (L) Scale of lies, (F) Reliability of scale, (K) Scale of correction, (Hs) Hypochondriasis, (D) Depression, (Hy) Hysteria, (Pd) Psychopathy, (Pa) Being paranoid, (Pt) Psychasthenia, (Sc) Chizoid, (Ma) Hypotension, [Mini-Mult Test]; (EX) Extraversion, (NT) Neuroticism, [EPITest]; (L1-L8) Positions in the colour Lusher test; “\_\_\_” Direct relationship; “....” Feedback.



Basic correlation data shows that hypochondria scale has a direct relationship with the psychasthenia scale and the schizoid scale ( $r = 0.47, r = 0.35, p < 0.05$ ), and inverse relationship with the scale of hypomania ( $r = -0.37, p < 0.05$ ). The scale of depression is correlated with the scales of hysteria and paranoid ( $r = 0.44, r = 0.35, p < 0.05$ ). The scale of hysteria, in its turn, has a direct connection with the scales of reliability and paranoid ( $r = 0.57, r = 0.34, p < 0.05$ ). The greatest number of direct links has paranoid scale (this scale is also called scale of rigidity) - with the scales of hysteria, depression scale of Mini-Mult test and the 8th position of Luscher test ( $r = 0.33, r = 0.34, r = 0.38, p < 0.05$ ). And also inversely correlates with the position 5 of Luscher test ( $r = -0.38, p < 0.05$ ). The EPI test neuroticism scale is inversely correlated with the correction scale (correction scale shows the level of concern over social status) of Mini-Mult test ( $r = -0.37, p < 0.05$ ). The direct relationship is revealed between the Luscher test 8th position and the Mini-Mult test paranoid scale; and the inverse relationship - with the Luscher's test 5th position ( $r = 0.33, r = 0.34, r = -0.38, p < 0.05$ ).

### **SUMMARY**

Correlation analysis that allowed to study the structure of diagnosed indices of the gifted freshman students studying arts and design, showed us that there are logical interdependences between emotional state defined by Luscher color test and personality traits defined by the Mini-Mult and the EPI test. These interdependences, in their turn, show that the first-year students have difficulties in adaptation to the new conditions.

The following peculiarities of the personality of gifted students were revealed: emotional stress, reduced sensitivity to the environmental influences and relatively low responsiveness to the social microclimate problems. All this is characterized by the absence of necessary "diplomacy" and consonance to the reference group's mood. The stable character of the relationships between personality traits and emotional state explored by Luscher color test is defined.

### **CONCLUSIONS**

In our opinion, the results of this study will enable to complete the elective courses groups most effectively, as well as to distribute creative tasks and to organize psychological adaptation training and other events in a more goal-oriented manner.

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## REFERENCES

- Heller, K.A., Mönks, F.J., Subotnik, R., Sternberg, R. (2000). *International handbook of giftedness and talent*. Social and emotional development and the personal experience of giftedness, (2), pp.203–212.
- Gross, M.U.M. (2002). *Social and emotional issues for exceptionally intellectually gifted students*. The social and emotional development of gifted children, pp.19–29.
- Grobman, J. (2006). *Underachievement in Exceptionally Gifted Adolescents and Young Adults: A Psychiatrist's View*. Journal of Secondary Gifted Education, 17(4), pp. 199-210. DOI: from <https://doi.org/10.4219/jsge-2006-408>
- Aurel, I.C. (2013). *Adaptation and Stress for the First Year University Students*.Procedia - Social and Behavioral Sciences, (78), pp. 718–722.
- Betts, G.T, Neihart, M.F. (1985). *Eight effective activities to enhance the emotional and social development of the gifted and talented: Roeper Review*. Journal on Gifted Education, (8), pp. 18-23.
- Well-Being. (2015). *The Relationship Between Intelligence and Psychological Well-Being in Incoming College Students*Psychology of Well-Being Theory, Research and Practice 5:4 DOI: 10.1186/s13612-015-0029-8.
- Field, T., Harding, J., Yando, R., Gonzalez, K., Lasko, D., Bendell, D., Marks. (1998). *Feelings and attitudes of gifted students*. Adolescence, 33, 331
- Burlachuk, H.F., Burlachuk, L.F., Morozov, S.M. (1999). *Thepsychodiagnosics glossary*, guide. St. Petersburg: Peter Combe, p. 528.
- Butcher, J.N., Dahlstrom, W.G., Graham, J.R., Tellegen, A.M, Kaemmer, B. (1989). *Minnesota Multiphasic Personality Inventory-2 (MMPI-2): Manual for administration and scoring*. Minneapolis: University of Minnesota Press.
- Luscher, M., Scott, I. (1969).*The Luscher Color Test*. New York: Random House.
- Bazyma, B.A. (2005). *The color psychology: Theory and Practice*. B. A. Bazyma. - M: Speech, p.205.
- Zaitseva Lyubov, V., Mayorova Irina, M., Fedorenko Marina, V., (2018). *Gifted Students' Personal Features Comparative Analysis Depending on Style Preferences in Painting*, HELIX, 8(1), pp.2858-2862.
- Viktoriya, V., Potapova, Marina, V., Fedorenko. (2015). *Concerning Investigation of the Cultural Dyssynchrony of the Mental Development of Intellectually Gifted Teenagers*, The Social Sciences. 10(7). pp. 1928-1931.
- Fedorenko, M.V., Bykova, S.S. (2016).*Work of the psychologist on correction of senior preschool children self-esteem*, International Journal of Environmental and Science Education, 11(9), pp. 2773-2783.



## Personality characteristics of gifted students of creative specialty

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Fedorenko, M., Potapova, V. (2014). *Interrelation of emotional intelligence, aggressiveness and anxiousness indicators of students of pedagogical specialties: gender differences study*, Life Sci J, 11(7s). pp. 453-456.