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# PSYCHOLOGICAL SUPPORT OF GIFTED STUDENTS' LEARNING ACTIVITY

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# Abstract

The present article discusses health-related risks in the self-realization of a gifted student. According to the WHO definition of health and on the basis of our own experience and analysis of relevant scientific literature, we single out the following possible obstacles to the self-realization of an intellectually gifted student:

a) a gifted person may become addicted to endorphins that the brain produces as the result of his/her complete commitment to his/her favourite activity;

b) catastrophe theory states that, if dedication of a gifted person is great enough but not supported by the growth of mastering appropriate techniques, it leads him/her to a catastrophe, in which his/her achievements decline abruptly;

c) the level of self-realization insufficient for a gifted person can reduce the value of physical health for him/her and cause the unwillingness to maintain a healthy lifestyle;

d) giftedness does not always ensure social well-being to its bearer, but can cause discontent, envy, and other negative emotions in people around (Lynch, 2004);

e) a gifted person who stands out from those around him/her may experience a subjective state of mental ill-being because of the fear of being evaluated by others;

f) there is a risk of inharmonious development of a gifted person;

g) the state of spiritual ill-being can endanger the hardiness of a gifted person.

The foregoing does not demonstrate only the urgency of identifying people gifted in any field, but also the urgency of their psychological support (in particular, within the walls of an educational institution).

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Keywords: Giftedness, self-realization, individual health, psychological support of learning process.

# 1. Introduction

In accordance with the concept of education reform by UNESCO and European countries, education is categorized as a basic human need. A child entering an educational institution should understand that he/she will not "learn once for the whole life"; but, a "lifelong learning" (in its various forms) awaits him/her.

The development of the global society under the laws of the industrial paradigm is replaced in the current period by the development under the laws of the post-industrial paradigm – the anthropogenic one. The reorientation of the society development to the goals of cultural development deals with the change of a human's place in the development process; a human turns from a development tool into its goal. No real movement forward is possible without turning the concept of education reform to a human.

Over the past decades, Russian higher education has done a lot of work to harmonize with European education in accordance with the Bologna Process requirements (Egorshin & Gus'kova, 2014). The harmonization applies to the content of education as well as its methods and forms (Kuleshov, 2008). The harmonization is carried out to implement normative documents regulating the activity of higher education institutions (HEIs). Russia's joining the European Higher Education Area (Bologna Process) demanded the unification of the processes of educational services quality assurance; accordingly, a Quality Management System based on GOST R ISO 9001-2008 (ISO 9001: 2008) is being implemented and already functions in many Russian HEIs. However, in international documents, nothing has yet been said about psychological support of learning process.

The attention of educational institution psychologists is usually focused on low-performing students. Our 10-year experience of psychological support of students expelled from medical HEI in the 1980s demonstrates that the main reasons of their drop-outs are the following (listed by frequency): intelligence level insufficient to study at the HEI, decrease of their professional motivation compared to the initial level ("I want to change the HEI, my future profession"), inability to learn (not mastering the technology of learning activity in medical HEI, which is different from school learning technology), changes in family situation ("I must stop studying full-time, I have to go to work"), etc.

In the 1990s, we worked for 10 years in medical HEI and with the students of the Faculty of Research and Academic Personnel (FRAP), preparing to work after graduation in the institutes of the RAMS (the Russian Academy of Medical Sciences), teach in medical HEIs. The most gifted students were selected then for this faculty after the 3<sup>rd</sup> year from all the medical HEIs of our great country. While being educated at the faculty according to in-depth programs, the selected students had an opportunity to do an internship during a semester in the best foreign universities. Along with teaching the academic discipline "Psychological and pedagogical bases of higher medical education" at this faculty, we also carried out psychological support then for these students. Our experience enabled us to assert that gifted students also needed psychological support.

#### 2. Problem Statement

Usually the term "gifted" is used to refer to a person possessing a special ability (Reber, 2000); the word "gift" implies that this ability involves inborn aptitudes to its development. Giftedness characterizes the range of activities in which a person can achieve great success (Mescheryakov & Zinchenko, 2003).

International conferences are held on the research of gifted people at different stages of their life; the techniques of identifying gifted people are developed and being perfected.

At the same time, the analysis of the colleagues' experience (Dubrovina, 2013) demonstrates that a creatively gifted student may be among low-performing students (the thinking, behaviour of such a student may deviate from the social norm accepted in the society in this period). The less common a particular behaviour is, the more likely it will be perceived by others as abnormal; world-around decoding which deviates from "normal" is also usually considered to be abnormal (Tvorogova, 2011). The specialists have long been interested in the differentiation between abnormalities and individual characteristics, the classification of personality traits, behaviour characteristics unusual to people around as pathology, or giftedness, or conscious violation of the established rules. Moreover, the giftedness of a person may manifest itself most brightly at the age that is specific to this particular person; the dynamics of giftedness manifestations is studied currently by the science called acmeology.

Our experience of teaching at the FRAP, as well as observation of the intellectually gifted students of this faculty, conversations with them, analysis of their academic achievements allow us to assert that not only the problem of identifying gifted students requires the psychologists' attention, but also the need of their psychological support. We focused our attention on health related risks for the self-realization of intellectually gifted students.

#### 2.1. Health psychology

Health is currently defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (the WHO Constitution, 1995). Federal Law of the Russian Federation No. 323-FZ gives a similar definition of health.

Social well-being manifests itself in a wide (sufficient for a given individual) dynamic system of social relations, with the presence of positive interpersonal relationships manifesting in the form of friendship and love. WHO paid serious attention to the "social support system against stress" (Reber, 2000). Social well-being is evaluated in foreign studies by the success of social and economic functioning of a person (Raphael et al., 1996 – cited by Tulchinsky & Varavikova, 1999).

The analysis of the content of "mental (psychic) well-being" concept can be carried out in the context of various psychological schools; depending on the operational definition of this concept, their representatives suggest appropriate psychodiagnostic procedures, methods to maintain it (Jahoda, 1958; Ryff, 1989 - cited by Shevelenkova, 1993).

Besides, considering the states of physical (studied mainly by physicians), mental and social wellbeing as indicators of individual health, the spiritual component of health is also considered according to the complex approach to a human. Spirituality is (from the perspective of materialism) the highest level of development and self-regulation of a personality; the main motivation-meaning regulators of life activity are the highest human values (according to A. Maslow (2002) the highest being values are truth, good, beauty, etc.) and peak experiences characteristic of self-actualizing personality. Frankl (1990) considers spirituality as the highest meaning dimension of a person, which is a superstructure over the physical and mental (psychic) dimensions; above-individual desires are also called "the highest motives" or

"metamotives". Spiritual well-being involves meaningful life that is willingly oriented to the realization of the highest values.

The interrelation between different components of well-being (physical, psychological, social and spiritual) is studied by the scientific community. Along with objective indicators of the well-being states, its subjective assessments are also studied. According to the subjective standpoint, a person him/herself identifies his/her level of health in different periods, building "inner picture of health" and "inner picture of disease" as parts of the "image of the world" (Leontiev, 1977). The concept of "life satisfaction" is close to the concept of "subjective well-being". The experience of the subjective well-being level is a constituent part of the life quality assessment by an individual (Dartau, Mizernitsky, Stefanjuk, 2009). WHO defines life quality as an individual's perception of his/her position in life in the context of the culture and value systems in which he/she lives and in relation to the individual's goals, expectations, standards and concerns. Along with the subjective component of life quality, its objective component is also singled out (WHO, 1995). Life quality depends on the state of physical and mental health, communication ability, psychological and social status, freedom of activity, stress, leisure activities, education, access to social assistance, etc. (the "standard of living" concept reflects the availability of material goods for an individual). A positive definition of health directs practice to cultivating health, not just combating diseases. Health promotion is the most effective strategy for disease prevention (Eysenck, 1993; Eysenck, 2002). In recent decades, in medicine there is an understanding of the primary role of individual's health-saving behaviour in prevention of noncommunicable diseases. In psychology, healthy lifestyle is regarded as a condition of life, person's self-realization; psychologists are concerned both with behaviour supporting mental well-being of a person (it includes activities aimed at self-actualization and self-realization, the achievement of success in life, personality maturity, etc.) and behaviour supporting social well-being of the person. Mental and social well-being contribute to immunity increase against somatic diseases (see data on psychosomatics - Brautigam, Christian & Rad, 1999) and mental disorders.

#### 2.2. Public health

By the WHO Constitution, the concept of individual health was supplemented by the concept of "public health" ("...the attainment of all citizens of the world...of a level of health that would permit them to lead socially and economically productive lives"). Public health care is a system of health protection oriented both to the health of the population and communities, and to individual health and the activities of a particular employee in the health care system. Moreover, public health care system implies necessary cooperation of medical institutions (health care, pharmaceutical ones), educational, research institutions, information services, administrative bodies (ministries, agencies, etc.), voluntary organizations (associations), health insurance companies, private medical and psychological practices, etc. (Kuleshova, 2016). The main purpose of public health care system is the management of public health, the change of behavioural stereotypes of the population in the direction of health promotion through education, counselling, advocacy, promotion of healthy lifestyle (Tulchinsky & Varavikova, 1999).

In our opinion, one of the tasks of public health is to identify and create conditions for self-realization of gifted people; the completion of this task will not only contribute to maintaining the individual health of

a gifted person, the prevention of his/her mental disorders and somatic diseases, but will also contribute to public health, economic prosperity of the society, will increase its social capital.

The problem is, what health related risks (in the understanding of health by the World Health Organization) can interfere with the self-realization of a gifted student; and what can society (in particular, an educational institution) do to reduce these risks?

#### 3. Research Questions

Our research aimed at finding answers to the questions: a) what health related risks can impede the self-realization of an intellectually gifted student; b) what life aspects related to health of an intellectually gifted student should be the focus of attention of the psychologist supporting his/her learning process?

#### 4. Purpose of the Study

The overall purpose of our research is to reveal a group of health related risks for the self-realization of an intellectually gifted student in learning process.

#### 5. Research Methods

We used the following research methods: 1) theoretical analysis of relevant scientific literature; 2) analysis of our own experience of teaching intellectually gifted students (students of the Faculty of Research and Academic Personnel of the I.M. Sechenov First MSMU); 3) the method of observation of these students during the educational process; 4) the method of the psychologist's conversation with them, the answers to the questions of interest to the students concerning their personal sphere; 5) the measurement of IQ (intelligence quotient) of students using H.J. Eysenck's test; 6) psychodiagnostic methods: a) the SAM (state of health, activity, mood) questionnaire authored by V.A. Doskin, N.A. Lavrentyeva, V.B. Sharay, M.P. Miroshnikov; b) Riff's Scales of Psychological Well-being (Russian version by Shevelenkova and Fesenko); 8) observation of study groups, carrying out sociometry in the groups (J. Moreno); 9) analysis of the results of medical screening of students in the university polyclinic; 10) analysis of students' academic performance; 11) a standard questionnaire developed in our university to identify the measure of students' satisfaction with their university studies.

Our research was carried out over 10 years (from 1994 to 2013) - 7 batches of students graduated from the Faculty of Research and Academic Personnel of the I.M. Sechenov First MSMU (each batch included on average 25 people). A total of 175 people participated in the research.

#### 6. Findings

As mentioned in the Introduction to this article, the most gifted students were selected for the Faculty of Research and Academic Personnel (FRAP) of our HEI after the 3rd year from all medical HEIs of our country; they were educated in the FRAP in the 4th, 5th, and 6th years. When selecting the students for the faculty, the Dean's office staff: a) took into account the applicants' academic performance during previous years at HEIs they came from; b) tested the applicants (academic achievement tests were used); c) organized an interview of each applicant with the leading specialists of our HEI. In addition to this procedure, we tested on our own initiative the students already selected for the faculty with the help of the

psychodiagnostic method by H.J. Eysenck. All the students of the 4th year of our faculty (FRAP) had the intelligence quotient (IQ) above average.

We singled out the risks for the health of an intellectually gifted student who sees for this period the meaning of his/her life, activity precisely in studies, in mastering the profession while studying at the HEI. Consider these 2 groups of risks: 1) the risks revealed as a result of our analysis of selected relevant scientific literature, 2) the risks revealed by us as a result of our own experience with gifted students.

#### 6.1. The first group of risks

1) In 2013, E. Fredrickson et al. (cited by Polikarpov & Polikarpova, 2015) published the results of their empirical research, which proves that: a) the brief experience of hedonic pleasure (as the result of short-term experience of positive emotions) entails a negative impact on the immune system, provokes inflammation and reduces antibody production (causing something similar to stress); b) the experience of eudaimonic pleasure (getting pleasure from meaningful activities aimed at serving the higher purposes) has a mild anti-inflammatory effect and stimulates antibody production, which extends human life.

However, a gifted person experiencing eudaimonic pleasure may literally become addicted to the endorphins that the brain produces as the result of his/her complete commitment to his/her favourite activity; becoming a workaholic, he/she demonstrates a kind of obsession. If it is impossible to do the favourite activity, realize the giftedness, there is a risk that a gifted person may undergo depression similar to drug withdrawal (Rothkopf D., cited by Polikarpov, Polikarpova, 2015, p.179).

2) Singularity theory proposed by mathematicians studies the model of the world based on a delicate interplay between discrete and continuous objects, is a generalization of the research of functions at maximum and minimum; Ch.Zeeman proposed to call the set of this theory and its applications catastrophe theory (sudden and abrupt changes in the response of a system to a smooth change in external conditions are called catastrophes). Ch.Zeeman gave an example of application of the theory to the research of a creative person (Arnold, 1990). A creative person (e.g. a scientist) is characterized by the author using the parameters: "technique", "enthusiasm", "results". It was studied how the scientist's results change depending on his/her enthusiasm and mastering the technique. It was found that: a) if enthusiasm is low, results grow monotonously and rather slowly depending on mastering the technique; b) if enthusiasm is high enough, qualitatively new phenomena occur - results can change with jumps depending on mastering the technique; the area of results, which the scientist in this case gets in, is designated as "genius"; c) the growth of enthusiasm, when not reinforced by a corresponding grow in technique, leads to a catastrophic decrease in results in this case, the scientist falls in an area designated in the study as "maniac"; e) jumps are possible from the "genius" state to the "maniac" state and vice versa. Catastrophe theory attempts to find a general rule that determines whether there will be a jump from one equilibrium state to another, and how to identify "turning points" of the system states.

Thus, the inner obstacles to the self-realization of an intellectually gifted person, achievement of high results are related to the level of his/her commitment to the chosen activity and the level of efficiency, leading to mastering the corresponding activity, the technique of performing this activity that will affect not only social well-being but also mental well-being of a gifted person (these named indicators of the state of his/her health).

3) The aspiration of a person to be guided in his/her life by a kind of ideal, abstracting from little nothings of life and finding creatively new resources to progress towards a desired future gives hardiness to the person (Leontiev, 2011). Spiritual well-being of a person, his/her creativity (non-obsession with stereotypes) affect the level of mental well-being. Spiritual ill-being of a person endangers not only mental well-being, but also indirectly his/her social and physical well-being.

#### 6.2. The second group of risks

4) Obstacles to the self-realization of a gifted person are possible due to the decrease of his/her attention to his/her body. The behaviour of any person implies taking care of his/her physical and mental health, responsibility for it, as for the main resource of his/her life on Earth. The level of self-realization insufficient for a gifted person can reduce the value of physical health for him/her ("Why live, if you still can not be realized?") The measure of the person's involvement in health-saving behaviour depends on the state of mental well-being/ill-being experienced by the person (Tvorogova, 2004; Tvorogova, 2017a); in turn, health-saving behaviour can enhance not only physical, but also mental well-being of the person, contribute to his/her self-realization.

5) Giftedness not always ensures social well-being to its bearer. Usually, a gifted person standing out among others can cause discontent, envy, and other negative emotions in people around. Every person has the potential to manage intraindividual components of his/her communication (his/her communication motivation, goals, social perception features, communication techniques, his/her reaction to feedback in communication, etc.) (Tvorogova, 2002). A person can translate his/her highest aspirations into the products of not only the spiritual and the material, but also the social world through daily communication with the help of his/her physical and mental resources; communication can be measured out by the person, it can imply the choice of partners for communication, the choice of the length and depth of contact with them, implies the possibility of unilateral withdrawal from the communication destroying his/her personality, damaging the health, the self-realization, etc. (Tvorogova, 2017b).

6) A gifted person who stands out from those around him/her may experience a subjective state of mental ill-being. Having fear of being evaluated by others, he/she often suffers from a kind of an "inferiority complex" due to his/her dissimilarity to other people.

As the result of our research, we revealed the dependence of the intensity of person's loneliness feelings on the ratio between his/her need to communicate, desired, expected and real position in the system of interpersonal relations, as well as on the activation of the intrapsychic defence mechanisms, causing a reduction of the corresponding positive or negative experiences (Tvorogova, 2002).

7) Inharmonious development as a risk of giftedness. An active position of a gifted person, finding a sphere where he/she could express his/her giftedness is more favourable for his/her health than a passive position. Maintaining the orientation towards positive goals (and not e.g. only failure avoidance); the cultivation of sanogenic (healthful) thinking (Orlov, 1998); focusing on the highest spiritual values that should become a regulator for a gifted person in setting everyday goals for his/her activity in various spheres of life, in developing programs and selecting means for their realization, in assessing self-efficacy; social activity, the ability to work together with others; personal growth; the cultivation of a healthy lifestyle, etc. – they all determine the directions of development (spiritual, social, mental, physical), implying the

harmony of development of a gifted person as a whole (Tvorogova, 2017a). Indicators of physical and mental health, as well as functioning efficiency act as objective regulators of this development; a subjective state of well-being, life satisfaction (a feeling of inner freedom, integrity, joy, etc.), ascribing high quality to one's life can be considered as a subjective regulator.

### 7. Conclusion

Increase of the social capital of the society implies, in our view, continuing education of people, improving quality of the educational process at all the levels not only by means of logistics support, by increasing the competence of teaching staff and managers of education institutions, selecting the content of education, improving the technologies of educational process, etc., but also by psychological support of the educational process.

Our researches demonstrate that the psychological service of the educational institution should not only keep low-performing students in the centre of attention and identify their resources to adapt to the requirements of the educational institution, but also participate in the identification of students gifted in any field and engage public health care system in the "cultivation" of their health. "Human capital", which determines the sustainability of an individual in this world, is not only his/her living standard, not only the "store" of knowledge and skills which every individual has, but also his/her health level (Fukujama, 1955; Schutz, 2004).

On the basis of our own experience and the analysis of relevant scientific literature, we revealed from the positions of health psychology the group of psychological risks, which should be, in our opinion, the focus of attention of psychologists supporting learning process with the aim of maintaining students' individual health at the appropriate level. To prevent these risks, psychological support of learning process should be aimed at: a) working with the public to create a social environment for students that would support them on the path to self-realization and contribute to their social well-being; b) developing communicative competence of the students; c) involving students in the practice of healthy lifestyle (contribute to it becoming fashionable among them) to maintain their physical well-being; d) supporting the student's aspiration to be guided in their lives by a kind of ideal, the highest spiritual values (the pursuit of truth, harmony, good, etc.) in order to enhance their spiritual well-being; e) teaching students the technology of learning activity (ability to learn), self-education; f) harmonious development to maintain their mental well-being.

To start this work in educational institutions within the context of public health to increase human capital (and thereby social capital of the society), Russian psychologists have to wait for the adoption of the Federal Law of the State Duma of the Russian Federation on psychological support (the law, which is not adopted in Russia yet) and the order of the Ministry of Education of the Russian Federation to establish the psychological service in educational institutions (not only in schools where psychological services are already functioning, but also in HEIs).

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