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**STUDENT'S TIME-AWARENESS FORMATION: SELF-  
ORGANIZED PERSONALITY AS PROMOTING FACTOR FOR  
MENTAL HEALTH**

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**Abstract**

This paper presents the main results of the research aimed at determining the conditions of formation of a technical university student's time-aware, self-organized personality to promote one's mental health. The actuality of the research is caused by engineer education modernization, which main goal is to prepare competitive specialists in the field of engineer task solving, people capable of maintaining their physical and mental health. The paper gives a definition of mental health, which is considered as a state of well-being in which a person can realize his/her potential, cope with life stresses, can work with great productivity and make a contribution to one's society. The investigation proves that man's mental health index is his/her ability of self-organization. It is specified that time management, self-organization skills are regarded as a regulated conscious person's activity, which aims at goal setting, time planning, as well as self-control, self-analysis and self-correction of one's actions and behaviour. Time management, self-organization skills secure timeliness and succession of student's life cycles changes. The research results involve working out the structure of a university student's time-aware, self-organized personality, determining the complex of pedagogical conditions of formation of a technical university student's time-aware, self-organized personality, maintaining one's mental health. The self-organized personality's structural components are as following: motivation-value, cognition and action-reflection components.

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**Keywords:** Health, university student's mental health, self-organization and time awareness, structure of a university student's time-aware, self-organized personality, pedagogical conditions, component.



## 1. Introduction

Mental health, in its turn, is the most important part of a person's health. According to the World Health Care Organization (WHCO), mental health – is a state of well-being, in which a person can realize his/her potential, cope with life stresses, can work with great productivity and make a contribution to one's society (What is mental health?, 2007). Among mental health criteria, WHCO singles out the following: self-criticism and criticism of one's own activity and its results, the ability of self-control in conformity with social norms, rules and laws, the ability to plan one's activity and realize these plans, on top of it, the ability to change one's way of behavior under the influence of changing life situations and other circumstances (Weist, 2001, Yeliseev, 2003). So, we may conclude that the evidence of one's mental health is a person's capability for self-organization, the main goal of which is one's control of his/her life by way of optimal employment of a person's resources, considering their individual peculiarities and abilities, on the basis of self-analysis, self-control and self-correction. In the situation of constantly increasing information flows and the necessity of being adequate in constantly changing studying and social conditions, university education requires students' independence and self-organization. Under these circumstances, time management, self-organization skills as a regulated conscious person's activity, aimed at goal setting, time planning as well as self-control, self-analysis and self-correction of one's actions and behavior, ensure a technical university student timeliness, rhythm and succession of life cycles changes. Moreover, time management, self-organization skills become a basis of a student's productivity, his/her effective self-realization, ability to compete, personal success, etc. and as a result promote their mental health. That is why, the formation of students' time management, self-organization skills should be considered as a means of promoting their mental health.

## 2. Materials & Methods

For accomplishing the designated tasks the following research methods were used: theoretical methods (analysis, interpretation and generalization, modelling), empiric methods (observation, interviewing, questioning, testing, experiment), data processing methods (statistic data processing methods, computer processing methods and data presentation methods).

## 3. Results & Discussion

The research theoretical and methodological basis is as following:

- professional higher education theories and guidelines of university students' preparation (Arkhangelsky, Belikov, Verbitsky, Granatov, Nain, Rezanovitch, Savva, Slastyoning and etc.);
- conceptions of personality self-organization and self-regulation (Vayzer, Graff, Zaenutdinova, Kozlovskaya, Konopkin, Morosanova, Nagornaya and etc.);
- time management theories (Morgenstern, Drucker and etc.);
- personality formation and development theories (Aseyev, Bogin, Bozhovitch, Vygotsky, Kiryakova, Leontyev, Froid and etc.);
- pedagogical theories of promoting good health (Aristotle, Y.A.Komensky, A.Maslow, M. Montessory, Plato, G.G. Russeow, M.M. Yalovenko and etc.).

On the basis of the analysis of the relevant research theoretical and practical data, we define a time-aware, self-organized person as the one who is aware of the time value, has specific motives, knowledge and competences of time management, is capable of setting goals, rationally planning his/her time, controlling, analyzing and correcting one's activity, taking into consideration his/her individual peculiarities. In the course of research, we have determined the structure of a university student's time-aware, self-organized personality (Table 1).

**Table 1.** Structure of university student's time-aware, self-organized personality.

<i>Motivation-value component</i>		
Realization of time as a value	Realization of the value of self-organization and time management	Motives for self-organization and time management
<i>Cognition component</i>		
Knowledge of one's personal peculiarities		
Self-organization and time management knowledge		Knowledge of ways of self-organization and time management
<i>Action-reflection component</i>		
Goal setting competences Competences in planning		Time management competences Reflexive time management skills

Besides, in the course of research, it was specified that the formation of a university student's time-aware, self-organized personality is a special process of interrelated teacher's and student's activity, aimed at creating conditions for rendering pedagogical assistance and support in the development of a student's behavior patterns of self-organization and time management by building his/her proper values, steady motives, relevant knowledge and competences in the sphere under consideration.

On the basis of the research data and teaching practice, we defined the complex of pedagogical conditions of formation of a university student's time-aware, self-organized personality, which ensures the process's effectiveness.

The complex includes: 1) formation of value attitudes to time by activating a student's reflexive position;

2) the development of a student's motives for time management and self-organization by applying critical thinking methods in class;

3) the development of student's behavior patterns of self-organization and time management on the basis of his/her subjectivity.

It is worth noticing that the expected result of the process under review (increasing a student's self-organization and time management skills' level and, as a result, mental health improvement can be achieved only if we keep strictly to the complex of the pedagogical conditions, where each preceding condition influences the following one.

The choice of the first pedagogical condition was predetermined by the fact that value guidelines are the main factor, which regulates and conditions a personality's motivation sphere. Value guidelines are the basis for personality's behavior patterns; they influence a person to a great extent and point to a personality's readiness for accomplishing concrete activity (Slobodnyuk, 2000). In the structure of activity, time is the most important factor as it constitutes the essence and quality of a personality's professional development. Time also determines the effectiveness of any professional activity, whereas velocity and precision of performing actions are the main criteria (Bolotova, 2006, Forsyth, 2007,

Saigushev et. al., 2016). This leads us to the conclusion that a student, if he/she wants to be successful, should value time and be aware of the importance of self-organization and time management skills. Reflection ensures a possibility of looking upon oneself, appraising one's activity, and it is the main factor of a personality's self-regulation serving as a basis for forming a personality's guidelines. Reflection objectivizes the process of action and its conscious management.

The choice of the second pedagogical condition is caused by the fact that a student, having entered a university, finds himself/herself in new surroundings, and he/she has to adapt to these surroundings, to learn to plan rationally, organize and control one's working day and free time. The transition from high school to university, change of the usual routine is accompanied by contradictions and breaking of life views. Some factors can be divided into two groups: subjective (age, gender, a person's physiological and psychological peculiarities) and environmental (peculiarities of social environment, rate and character of activity) (Ananyev, 1980). During the transition period and crisis in the personal development, there appear new interests, needs, motives and values, on the basis of which all corresponding personal qualities are rebuilt. Relying on this, we may conclude that the motives inherent to a concrete age contribute to a personality building and influence one's self-awareness and understanding of one's own place in society. The most important moment in a university student's personality formation is realization of a very simple maxim: the inability to organize one's time leads to failure in studies and life. The student, driven by a motive to become a high level professional, meeting the requirements of constantly changing surroundings, in the long run must realize the necessity of self-organization and time management skills. In the course of the experiment, it was established that the effective development of motives for self-organization and time management skills is conditioned by active usage of critical thinking methods, which is based on cognitive skills and strategies, enhancing the chances of getting expected results.

The necessity of the third condition is explained by the following reason: the choice of the behavior pattern is determined by a certain behavior model as a reflection of a person's interaction with the environment (Milman, 1990). Quite a few of psychologists allege that a man's behavior changes in accordance with the situation. It means that man's behavior may be purposefully modified. This conclusion points to the necessity and possibility of creating special pedagogical conditions in the process of education, which purposefully contribute to students' developing behavior patterns of a self-organized, time aware personality. Nevertheless, it is necessary to point out that purposeful behavior modification can be carried out relying upon a person's subjective experience. As a result, a time-aware, self-organized person, is to have necessary knowledge and competences in the spheres of goal setting, planning, effective time management, taking into consideration one's individual peculiarities, as well as controlling action performance, analyzing and correcting one's behavior if necessary.

The criteria of the self-organization, time management skills level are as follows: motivation-value, cognitive, action-reflexive, which correspond to appropriate components in the structure of a university student's time-aware, self-organized personality (Table 1). Every criterion is expressed by qualitative indices. For example: the indices of the motivation-value criterion are: time value awareness, self-organization and time management value awareness, motives for self-organization and time management; the indices of the cognitive criterion – individual peculiarities awareness, knowledge of the self-organization and time management sphere, knowledge of the self-organization and time management

ways; the indices of the action-reflexive criterion - competences in the spheres of goal setting, planning, effective time management, reflexive skills in time management.

To define the indices of the motivation-value criterion, we used the modified version of “Diagnostics of a personality’s motivation structure” (a sample for pupils) by Milman (1990). Besides, we used: methods of exploring value guidelines by Rokitch, which are based on direct ranging of a value list; methods of exploring students’ studying motives by Rean, Yakunin, based on revealing the most important reasons for studying (Badmayeva, 2004); questioning. To assess the indices of the second criterion, we used a test to define the cognitive criterion level, made on the basis of the diagnostics by Savva (2008), as well as the test “Time management, self-organization skills level” (Bondarenko et. al., 2008). The indices of the third criterion were determined with the help of the original methodology of action-reflexive criterion assessment, according to which students had to rank every statement from 0 to 3.

#### **4. Conclusion**

Having revealed and characterized every pedagogical condition, we worked out a methodology which ensures university students’ transition to a higher self-organization and time management level, thus promoting the students’ mental health. This methodology was experimentally tested in pedagogics classes and employed at the special course “Students’ self-organization and time management skills” at “Magnitogorsk State University”. Mental health is characterized by the personality’s motivation, emotional, intellectual and spiritual well-being. The indices of perfect mental health are as follows: psycho-social development adequate to one’s age; positive self-assessment and self-respect; a reasonable independence level; the feeling of a ‘life leader’, as a man’s confidence in his power to build his own life; effective ways of satisfying one’s needs; skills to adapt oneself to the environment; an ability to study and work successfully; an ability to cope with stress and failures, an ability to interact with other people (Fomin, 1998).

In conformity with the above mentioned, the following methods of the students’ mental well-being assessment were chosen: questionnaire on students’ mental well-being assessment by Stepanov (Nikiforov, 2005) and the scale of mental satisfaction level assessment according to Gundarov (1993). The first methodology helps to reveal the integral index of mental health, which characterizes the examinee’s mental balance and mental comfort. The second methodology allows assessing the examinee’s general state of physical health.

#### **4. Acknowledgement**

The experimental work comprised two stages: a verifying experiment was carried out on the basis of three universities: Magnitogorsk State University (MaSU), Nosov Magnitogorsk State Technical University (MSTU), Glinka Magnitogorsk State Conservatoire (Academy of music) (MaSC) with 434 students, taking part in it; and modelling experiment, which was conducted in MSTU, involving 107 students.

During all the experimental stages, the diagnostics of the self- organization and time management skills level and mental well-being level was conducted simultaneously. In the course of the verifying

experiment, the test “Time management, self-organization skills level” and the questionnaire on students’ mental well-being assessment by Stepanov were used. It was established that on average 52% and 65% of the respondents displayed low time management skills and a mental health well-being level; only 22% and 16% of the students showed a high level; correspondingly, 26% and 19% of the tested displayed a medium level. On the whole, the results of the verifying experiment proved the actuality of the formation of students’ time management, self-organization skills and allowed us to formulate a hypothesis about the inter-correlation between the student’s self-organization and time management skills level and the mental health well-being level.

The modelling experiment aimed at testing of the effectiveness of pedagogical conditions and methodical support of the formation of students’ time management, self-organization skills and checking how the inculcation results tell on the students’ mental health well-being level. The experiment was conducted on the variable basis at pedagogical classes, in fact it was characterized by purposeful varying of separate pedagogical conditions in groups of students, who were similar in their self-organization and time management skills level, and subsequent comparing final results. This way, three experimental and one control groups were formed. The preliminary data of the verifying experiment proved that practically no specific differences between the experimental and control groups were registered before the modelling experiment. As far as we speak about the random choice of the examinees, we may assume that in totality the correlation between the students’ revealed time management and self-organization skills level and the mental health well-being level is the same.

Table 2 shows the results, obtained in the control and experimental groups with regard to the change of the university students’ self-organization and time management skills level. The comparison of these data permits to indicate a steady increase of the number of students at a higher level. Whereas, these changes can be observed only in experimental groups. Still, the best results were obtained in the experimental group, where all three pedagogical conditions in complex were applied. Thus, we come to the conclusion that the complex of pedagogical conditions influences the university students’ time management and self-organization skills level more intensively than each separate pedagogical condition does.

**Table 2.** Comparison of modelling experiment’s results with regard to change of university students’ time management and self-organization skills level.

<i>Groups</i>	<i>Levels</i>						<i>Number of people</i>
	<i>Low</i>		<i>Medium</i>		<i>High</i>		
EG-1 (Start)	14	52%	7	26%	6	22%	27
EG-1 (Fin)	7	26%	13	48%	7	26%	27
EG-2 (Start)	13	50%	8	31%	5	19%	26
EG-2 (Fin)	6	23%	9	35%	11	42%	26
EG-3 (Start)	14	52%	7	26%	6	22%	27
EG-3 (Fin)	5	19%	10	37%	12	44%	27
KG (Start)	14	52%	7	26%	6	22%	27
KG (Fin)	14	52%	7	26%	6	22%	27

Simultaneously, the experimental data were obtained, illustrating the directly proportional influence of the increase of the university students' time management and self-organization skills level on their mental health level, where the correlation coefficient is  $(k) = 0,87$ .

## References

- Ananyev, B.G. (1980) Selected works in psychology: in 2 volumes. Moscow: Pedagogics, 1. V.
- Badmayeva, N.Ts. (2004) Motivation factor influence on intellectual development. Ulan-Ude : VSGTU -Press.
- Bolotova, A.K. (2006) Time management psychology: manual for university students, studying psychology. Moscow: AspektPress.
- Bondarenko, V.V., Resnik, S.D. & Sokolov, S.N. (2008) Personal management. Moscow: Infra.
- Fomin, N. A. (1998) Psychophysiology of health. Cheliabinsk.
- Forsyth, P. (2007) Successful Time Management. UK, 161.
- Gundarov, I.A. (1993) Urgent issues of practical valeology. *Valeology: diagnostics, health keeping means*. Saint-Petersburg: Nauka.
- Milman, V.A. (1990) Method of personality motivation sphere exploration. Moscow: MSU.
- Nikiforov, G.S. (2005) Psychology of health manual. Saint-Petersburg: Peter.
- Saigushev, N., Savva, L., Vedeneva, O. & Tsaran, A. (2016) The development of positive mounting on efficiency increase of mastery in marketing among engineering university students. *SHS Web of Conferences*, 28, 01090.
- Savva, L.I. (2008) Conditions of higher professional education humanization: monograph. Magnitogorsk : MaSU.
- Slobodnyuk, E.G. (2000) Professional value guidelines as a factor of forming a would-be teacher's personality. (PhD Thesis), Magnitogorsk: Magnitogorsk State University.
- Weist, M.D. (2001) Mental health promotion. *Journal of School Health*, 71, 101-104.
- What is mental health? (2007). World Health Care Organization. Available at: <http://www.webcitation.org/618zhgl7q>
- Yeliseev, V.V. (2003) Psychosomatic diseases. Reference book. Moscow.