A pilot study on persona-logical tendencies in the process of the students' personality development at a university

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ABSTRACT: The qualitative and quantitative characteristics of the students' psychology of personality and processes that determine and induce the students' activity are presented and considered in this article. Consideration is also given to the problem of the students' typology in academic groups. The main attention, though, is devoted to the problem of activating the reactive personality, including the main psychical characteristics and typical students' delusions, as well as their evident prospects. The problems associated with activating the reactive personality are considered. This leads to the conclusion that the main statements of personality theory by Allport can be satisfactorily put to use for an analysis of the behaviour of university students.

INTRODUCTION

A particular characteristic of the student's environment, as compared with the industrial production, is the uniformity of the social status and *production plan* (curriculum).

The characteristic features of the university's social relations can be attributed to the lack of economic interrelations between the students in the process of studies at a university. Legal rules and political activity are determined by the university regulations. Philosophical and ethical problems should ideally lean upon ideas of Heidegger about interpreting thoughtful mood (as addition to calculative thinking in the traditional educational system) [1], Schweitzer's idea in the sphere of morality that everyone was to have a reverential attitude towards life [2] and Francl's theory of logotherapy [3][4].

The kernel of a student's personality as presented in Figure 1 is shaped by factors such as his/her streaks of character, habits, aims and learning styles. The external layer of the personality kernel includes components of the student's external world in the course of four or five years. The basic information about the advancement of students or students not making the satisfactory progress is stored in the dean's office and is mostly available for analysis.

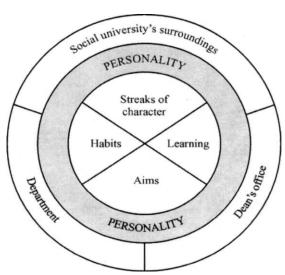


Figure 1: A simplified structure of the student's personality when analysing the student's persona-logical tendency.

The absence of previous research on this topic provides a good justification for this article. It is worth noting that the results of psychological investigations in the sphere of self-actualising relate mainly to students who are deeply involved in the sports and games, and the students that take an active interest and part in the research work being conducted in laboratories of the department.

There is a high probability that the students mentioned above can be related to the potential group of the persona-logical direction.

The aim of the research is to clear up qualitative and quantitative characteristics of the students' psychology of personality (as the open system) and processes that determine and induce the students' activity. Consideration is also given to the important problem of the students' typology in the academic groups, in particular, associated with aspiration for self-actualising or reduction of stress or lack of self-confidence.

COMPARISON CHARACTERISTIC OF THE OBJECTS OF PERSONA-LOGICAL DIRECTION UNDER CONDITIONS OF INDUSTRIAL PROCESS AND TRAINING AT A UNIVERSITY

It is apparent that the demand to be a personality cannot be realised beyond the conscious activity from the first steps of a student's involvement in the training process, and the uninterrupted interaction between a student and the teaching staff at the university conditions takes place.

The fact that the latter is changed periodically stimulates the mental development and perfection of a student's personality. This characteristic manifests itself under university conditions more intensively than in industrial conditions. This fact confirms Allport's assertion that personality is a process rather than the completed product [5-7].

It is under the university's conditions that each status of personality is oriented towards a certain direction aiming at its future activities. The latter are correlated with Allport's statement that the personality can be understood only by defining what the personality could be in future. Of great importance is the characteristic connected with the possibility of revealing the personality's potentials in the act of being formed at the university's conditions and its estimation.

Activity of a personality at the genesis conditions at a university may be thought as guarantee of its future advanced activities in spite of the absence of the active and purposeful influence of the surrounding world. It should be noted that the level of personality's activity of the advanced students will have a definite influence on the level of demands connected with the evaluation of the students' knowledge. The indicated characteristic can be considered as not a deliberated purposeful process in the social environment of the university.

The development of personality at a university, as well as industrially, is characterised by creating new and newer motives. Characteristics of the latter ones at the university are associated with their regular repetition within the limits of every semester, which assures the increase of the scientific level of the material to be studied in such conditions.

ANALYSIS OF THE STUDENTS' PROGRESS IN STUDIES

Students' Poor Progress at the Final Session

Data concerning poorly performing students, starting with the 2004/2005 academic year, are shown in Table 1. The progress in studies was calculated using the following formula:

$$P = \frac{A+B}{C \cdot N} \cdot 100 \%$$

where A is the quantity of students failed in examinations at the autumn term; B is the quantity of students failed in examinations at the spring term; C is the quantity of students in the university group; whereas N is the quantity of terms.

As may be inferred from the data given in the Table 1, the progress in studies of students who entered the university in 2004 within the span of seven terms is equal to 55.0 per cent for the specialty Electrical Power Stations (EPS) and 29.4 per cent for the specialty Electrical Systems (ES). Similar results of the progress in studies were obtained for the students who enrolled at the university in 2005 and 2006.

It should be noted that there is an essential difference between the results of progress in studies between the specialties being discussed in this analysis. The reason is that the pass mark for the students of the specialty ES at the entrance examination was greater than the pass mark for specialty EPS.

The relative quantity of the poorly performing students over the last four years has varied moderately. As it would be expected the greatest number of poorly performing students was observed at the first and second courses of their studies.

Table 1: Data concerning the students' poor progress in studies.

	Specialty	Number of students	Term	Quantity of students					
Academic years				Course of studies				Total	Progress in studies (average value)
				1 st	2 nd	3 rd	4 th		Percent
2004-2005	EPS	26	A	21	14	13	10	58	55.0
			S	14	17	11		42	
	ES	16	A	4	5	2	7	18	29.4
			S	4	6	5		15	
2005-2006	EPS	42	A	19	20	16		55	40.0
			S	16	13			29	
	ES	28	A	8	11	3		22	29.3
			S	7	12			19	
2006-2007	EPS	28	A	13	12			25	50.0
			S	14				14	
	ES	18	A	4	10			14	38.8
			S	7				7	

Remark: EPS - Electrical Power Stations; ES - Electrical Systems; A - Autumn term; S - Spring term.

Survey of Students Making Unsatisfactory Progress

It is believed that the prevailing portion of non-active (reactive) students forms a part of the poorly performing students. A comprehensive investigation of the mentioned supposition was based on the findings obtained from the questionnaires (see Table 2) of the second, third and fourth year students, training in specialties Electrical Power Plants and Electrical Systems and Networks, who have not made satisfactory progress during the final (autumn) examinations.

Table 2: Analysis of the students' poor progress in studies (autumn of the 2007-2008 academic year).

Reasons of the student's poor progress	Quantity of students, %
1. Difficulties in understanding of some lectures	92
2. Proper attention was not paid in some disciplines	75
3. Some lectures did not provoke any interest	72
4. Absence from some lectures without a cause	75
5. Absence from some examinations not without reason	6
6. Absence from some lectures with good reasons	37

The findings and comments concerning the first and second points of the questionnaire include the following:

- poor understanding of the lecture content by the students can be attributed to his/her natural mental faculties for learning a certain subject or to the insufficient skills of a lecturer. It is obvious that in the latter case the mentioned phenomenon would be equally referred to by many other students;
- the lack of students' attention to the concrete discipline was attributed mainly in the case of insufficient motivation by a lecturer to deliver the lecture content for the future students' engineering practice or as a basis for subsequent disciplines.

The comparative analysis of the results obtained at examinations is the matter that the dean and the heads of the departments should take into consideration.

The essential cause of the students' poor progress, as it follows from the completed questionnaires, is connected with the insufficient motivation by the lecturers in certain disciplines.

It means that one possibility is that the way of activating the reactive students may be associated with implementing the definite psychological influence excluding or weakening the predetermined main cause.

THE PROBLEM OF ACTIVATING THE REACTIVE PERSONALITY AT THE UNIVERCITY CONDITIONS

The Social Portrait of a Reactive Personality

A simplified structure of the university students' association is shown in Figure 2. The main psychical characteristics of the reactive personality can be reduced to the following:

- student's personality is not motivated;
- student does not follow prospective aims in the process of education;
- student is not active that means he/she does not want to commit himself/herself in the process of attending the lectures and fulfilling the course works;
- student performs course work calculations and other kinds of design activities after prescribed deadlines;
- student misses lectures without any cause or reason;
- student is of the opinion that his/her main aim is to obtain a university diploma.

Typical Student's Delusions

The principal delusion of the extremely important character consists of erroneous evaluation under the real industrial conditions. As this often takes place, the following critical assertions are ignored:

- energy production (at conditions of the specialised technical services and personnel on duty) requires the special sound knowledge for the active exchange of opinions (especially under the emergency conditions);
- interaction between specialists at the conditions of technical services that requires the definite skills being acquired under the contacts between specialists, which exclude the passive behaviour at the production processes and emergency conditions;
- prospective possibility to obtain a job abroad is available at all times;
- the enclosure in the diploma (academic transcript) a list of disciplines and received marks is of no interest for the employers;
- references from the university will never be required.

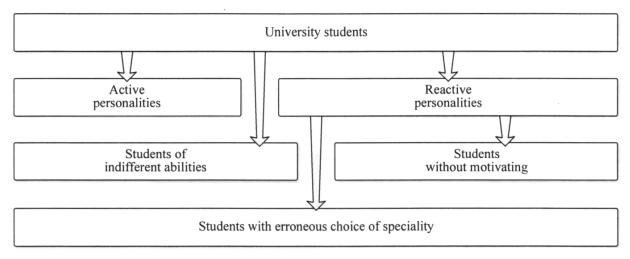


Figure 2: A structure of the university student's personalities.

Evident Prospects of a Reactive Personality

To the most rugged consequences of poor teaching should be attributed to the following factors:

- lack of the sound theoretical knowledge in the field of more important disciplines;
- lack of encouragement, which was not formed in the course of teaching at the university to put the questions;
- *lack of one's own opinion* on any problem of industrial processes.

Steps on the Road to Active Personality

The problem of activating the reactive personality should be central at any university. As this takes place, it is evident that an individual approach to solving the problem is of crucial importance. The overall approach to changes in the student's psychological orientation is considered below.

The first step is the information character that includes the following:

- enlighten the students about the essential engineering professions in electrical systems and networks, their features and particular demands;
- inform the reactive students, by the use of concrete examples, about the negative consequences connected with the passive behaviour.

The second step is characterised by the concrete description of the following consequences such as fulfilling the *individual tasks with assistance* whenever possible, *not passing the individual tests by the time fixed*, etc.

Transforming students from the reactive state can be realised when students are conditioned to progress through the process characterised as *motive - aim - new motive - new aim*, etc. This means that the main task of the teaching staff consists of the task of bringing the reactive students to the main stream by presenting concrete examples of negative consequences of their probable future career prospects so that they draw their personal conclusions from such examples. In this case, the likely changes occur from students' polite listening to their engagement in direct dialogue with the lecturer.

The encouraging words put to students of the university should include in all cases the following advices [8][9]:

- striving to gain their own view point on the problem;
- the ability to persist in one's own opinion;
- constant striving for self-perfection.

CONCLUSIONS

The main problems and the paths of encouraging the students in their transformation from a passive to an active state during the process of their training at the university were presented and considered.

The research presented here largely confirms that the main statements of the personality theory by Allport can be put to effective use for an analysis of the behaviour of university students.

REFERENCES

- 1. Heidegger, M., Gelassenheit. Pfullingen: Gunter Neske (1959).
- 2. Schweitzer, A., Kultur und Ethik (1924).
- 3. Frankl, V., Der Mensch vor der Frage nach dem Sinn. Miinchen, Zurich: Piper (1979).
- 4. Rogozin, G.G., Frankl's theory of logotherapy is it a remedy against the world moral crisis attack on university students? *World Transactions on Engng. and Technol. Educ.*, 5, 3, 421-424 (2006).
- 5. Allport, G.M., The open system in personality theory. J. of Abnormal and Social Psychology, 61, 3 (1960).
- 6. Allport, G.M., The general and the unique in psychological science. J. of Personality, 30, 3 (1962).
- 7. Antsyferova, L.I., Psychology of personality as an *Open system. Problems of Psychology*, 5 (1970) (in Russian).
- 8. Krick, V., An Introduction to Engineering and Engineering Design. New York: John Willey and Sons, Inc. (1970) (in Russian).
- 9. de Bono, E., The Use of Lateral Thinking. Penguin Books (1976) (in Russian).