

PREVENTION OF PROFESSIONAL IN STUDENTS

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The study involved 368 first year students and 376 fourth year students of the Orenburg State University, of which 416 were male and 328 were female. The study used a questionnaire «Work-Related Behavior and Experience Patterns» (AVEM) developed by Schaarschmidt W. and A. Fisher at the Institute of Psychology University of Potsdam and adapted under the guidance of T.I. Ronginskaya. None of the students had parameters with extremely high or extremely low values. High values implied active coping strategies, striving for excellence, satisfaction with life and professional claims, in both the first year students and the fourth. Type S prevailed in both male and female students (78,16 and 68,97% respectively) – thrifty, frugal, with an average level of motivation, energy costs and professional ambitions. Type A with low tolerance to frustration and stress was found in 5,75 % female students. In the fourth year, the significance of success in professional work and commitment to energy costs reflect the maturity and constructive attitude to the professional activity.

Keywords: prevention, adaptation, disorders

On the one hand, psychophysiology of professional human activity is studied by natural sciences, on the other – by such branches of psychology as labor psychology and engineering psychology. Professional psychophysiological diagnostics are most relevant for occupations that impose strict requirements on psychophysiological capabilities of a working person. In this aspect, professional psychophysiological selection and identification of professional fitness is made by comparing the properties of neural processes of a human with psychophysiological «cost» of professional activity [8].

Purpose. Prevention of stress among students. Tasks – formation of active skills for coping with stress, formulation of objectives, self-control.

Materials and methods of research

The study involved 368 first year students and 376 fourth year students of the Orenburg State University. Selection criterion for the study was voluntary factor. We have used a questionnaire «Work-Related Behavior and Experience Patterns» (AVEM) developed by Schaarschmidt U and Fischer AW at the Institute of Psychology at the University of Potsdam and adapted under the guidance of Ronginskaya T.I. Professional behavior is determined by the following three main factors:

1. Professional activity is a person's willingness to expend energy in professional work and its determining factors.
2. Strategies for dealing with problematic situations include active problem solving or avoiding.
3. Emotional mood for professional activity means a person's attitude to the profession, based on a sense of professional success and life satisfaction.

The questionnaire consists of 66 statements combined into 11 scales. Each scale consists of six statements, the degree of agreement with which is evaluated by the examinee on a 5-point scale ranging from «Strongly Agree» – 5 points to «Strongly Disagree» – 1 point. Depending on the ratio of indicators on different scales, we determine the type of behavior in a professional environment that allows inferring the presence or absence of professional burnout syndrome. Interpretation of results according to the AVEM method: 6–10 points – especially low values; 11–15 – low

values; 16–20 – average values; 21–25 – high values; 26–30 – extremely high values [8, 12].

Results of research and their discussion

Use of AVEM questionnaire showed that no students with extremely high or extremely low parameters were observed. High values imply active coping strategies, striving for excellence, satisfaction with life and professional ambitions, in both the first year students and the fourth. High values in the fourth year students relate to the feeling of success in professional work and willingness to expend energy, which reflects the maturity and constructive attitude to professional activities. Assessment of mental load on the students is reflected in AVEM questionnaire individual scales (Table 1).

As can be seen from the above data, students are highly active in learning activities, which results in an increased susceptibility to energy costs and high professional claims. High activity level is consistent with a moderate tendency to refusal in case of failure. Noteworthy is the average level of a sense of social support from the immediate environment. This can be explained by adaptation of the first year students to the new conditions of learning environment. During this period, a new social role of a student is formed. At the same time, it becomes the basis for the formation of active coping strategies and, as a result, an increased success of one's activities.

A number of features peculiar to professional adaptation stage characterizes the process of first year students' social adaptation. On the foreground stands the need for selection, competition as well as efforts to achieve higher social status in the student group. Another problem of this period of study is the requirement for increased independence and the ability to make decisions in difficult circumstances when being first exposed to student activity [11].

Table 1

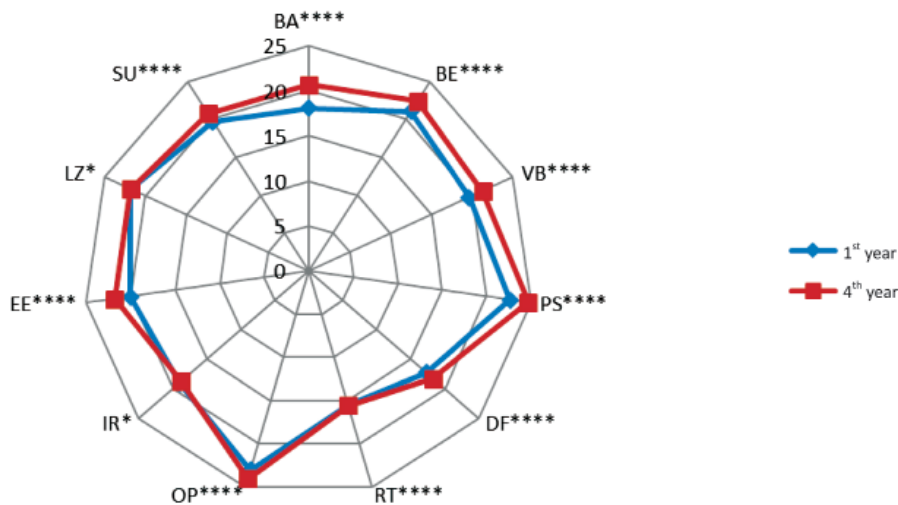
Behavioral features of the first and the fourth year students of a multidisciplinary university on AVEM scale

Scale	First year students <i>n</i> = 368		Fourth year students <i>n</i> = 376		p
	M ± m	25–95%CI	M ± m	25–95%CI	
BA	18,07 ± 0,12	17,84–18,31	20,66 ± 0,15	20,35–20,96	0,000001
BE	21,03 ± 0,17	20,68–21,36	22,367 ± 0,15	22,06–22,67	0,000001
VB	19,64 ± 0,18	19,28–20,01	21,31 ± 0,16	20,98–21,63	0,000001
PS	22,66 ± 0,22	22,23–23,10	24,65 ± 0,23	24,19–25,11	0,000001
DF	17,28 ± 0,12	17,04–17,52	18,26 ± 0,14	17,98–18,53	0,0001
RT	15,55 ± 0,22	15,12–15,99	15,55 ± 0,28	14,99–16,11	0,0002
OP	23,03 ± 0,19	22,65–23,42	24,04 ± 0,20	23,64–24,44	0,00088
IR	19,03 ± 0,15	18,72–19,33	18,74 ± 0,14	18,45–19,03	0,09
EE	20,05 ± 0,15	19,74–20,37	21,78 ± 0,16	21,45–22,11	0,0001
LZ	21,77 ± 0,15	21,47–22,07	21,79 ± 0,15	21,49–22,09	0,06
SU	19,69 ± 0,11	19,47–19,92	20,76 ± 0,10	20,55–20,96	0,0001
Overall score	217,59 ± 0,79	216,02–219,16	230,84 ± 0,86	229,13–232,55	0,000001

Note : p – level of significance according to the Mann-Whitney-Wilcoxon test, Kolmogorov-Smirnov test and Wald-Wolfowitz runs test; M – mean; m – standard error (mean); 25–95%CI – confidence interval.

For further interpretation of the results, we have carried out a comparative analysis of the AVEM questionnaire results of the first and the

fourth year students. As a consequence, it revealed statistically significant differences for individual scales of the questionnaire (Figure).



Comparative analysis of the AVEM questionnaire results of the first and fourth year students. Note hereinafter: * – $p \leq 0,05$; ** – $p < 0,005$; *** – $p < 0,005$; **** – $p \leq 0,0005$ – confidence level when comparing student groups from the first and the fourth year of study; BA – Subjective activity value; BE – Professional ambitions; VB – Readiness to expend energy; PS – Striving for excellence; DF – Ability to maintain distance with respect to work; RT – Tendency to refuse in case of failure; OP – Active coping strategies; IR – Inner calm and balance; EE – Sense of success in professional activity; LZ – Satisfaction with life; SU – Sense of social support

Conclusions

1. Type B – burnout, not detected among students.
2. Type A – low tolerance to frustration and stress, found in 5,75 % females.

3. Type S – prevailed and had comparable values in both males and females (78,16 and 68,97% respectively) – thrifty, frugal, with an average level of motivation, energy costs and professional ambitions.

Table 2

Gender features of students' behavior on the AVEM scale

Type of Behavior	Female students (n = 328)		Male students (n = 416)	
	n	%	n	%
Type S	60	68,97	68	78,16
Type G	18	20,69	19	21,84
Type A	5	5,75	0	0
Type B	0	0	0	0
Not defined	4	4,59	0	0

Note: Type S – thrifty, frugal, with an average level of motivation, energy costs and professional ambitions; Type G – healthy, active, capable of solving difficult problems, attaching high (but not extreme) importance to work, controlling his/her own energy costs, characterized by a constructive way of overcoming failures and defeats; Type A is characterized by extremely high subjective value of professional activities, a high degree of readiness for energy costs, low tolerance to frustration and stress; Type B – burnout type; marked by low subjective activity value, low stress tolerance, limited ability to relaxation and constructive solution of problems, tendency to abandon difficult situations, constant feeling of anxiety and pointless fear; Type of behavior associated with work is not defined.

4. Type G – healthy, active, capable of solving difficult problems, attaching high (but not extreme) importance to work, almost equal rate found in females and males – about 21 %.

5. Fourth year students are characterized by a high degree of readiness to energy costs, that may in itself be a risk of rapid deterioration and should be considered when distributing professional load.

6. In relation to the work, fourth year students tend to keep a distance, which in the long term may lead to professional dissatisfaction against the backdrop of the success of others.

7. In the fourth year, the significance of success in professional work and commitment to energy costs reflect the maturity and constructive attitude to the professional activity.

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