

CHARACTERISTICS OF TOLERANCE TO STRESS OF FUTURE SPECIALISTS WITH SOCIONOMY OCCUPATIONS

Halyna Dubchak

The Maria Grzegorzewska University, Poland

Abstract

The article discusses the issue of tolerance to stress of future specialists with socionomy occupations. The “professional stress” concept is expanded. The empirical research of stress tolerance of modern Ukrainian students from universities and vocational schools is described. General and distinctive characteristics of tolerance to stress of future specialists with different socionomy occupations are determined.

Keywords: *vocational training, socionomy occupations, stress, tolerance to professional stress.*

Introduction

These latter days are characterized by growing intensification of labour, increasing requirements for professional competence and person’s stability during professional activities, therefore people have to be ready to act and to be able to overcome stress conditions, everyday stressful situations. In this regard, the issue arises as for timely prevention and correction of stress that should be based, first of all, on adequate diagnosis of early signs of stress as well as on determination of individual predisposition to stress development and on use of different strategies to cope with stressful situations.

Specialists with different socionomy occupations should be paid special attention by scientists, because such professions are based primarily on work with people and, therefore, such work includes the most difficult activities. Thus, formation of tolerance to professional stress of future socionomy specialists must be considered as one of the most important aspects of their training that would protect young people for a large degree from back-breaking (as for psychological parameters) work, and society from the negative effects of psychological inadequacy.

Development of this issue is important not only in theory but also in a practical plan, particularly concerning prevention, early diagnosis and correction of various mental disorders for achievement of people high performance.

Analysis of the corresponding psychological literature shows that today there are only a limited number of studies devoted to specific aspects of training of specialists in different professions (Крайнюк, 2007; Кокун, 2012), which demonstrates clearly lack of attention paid by researchers to this issue and causes gaps in training of specialists in socially-oriented professions. Thus, attempts to study tolerance to stress of future experts are made in works of Shcherbatyh (Щербатих, 2006), Крайнюк (Крайнюк, 2007) and others. The structure of a

personal component of tolerance to stress of students in an intellect testing situation and the group of psychological factors that hinder development of tolerance to stress are investigated by Hutorna (Хуторная 2007); systemic determinants of tolerance to stress depending on age and ethnic psychological aspects are studied by Bohan (Бохан, 2008).

It should be noted that specialists in sociometry professions are influenced by both universal stressors affecting any professional activity and specific stressors caused by peculiarities of relationships that are developed in “person-person” professions, so the formation of such professionally important quality as tolerance to professional stresses are required from them.

We examine tolerance to professional stress basing on the systematic approach methodology that describes, in general terms, the structure “person-professional environment”, psychic reality as a dynamic whole. Therefore, we believe that tolerance to professional stress is an integrated quality of a specialist as a subject of activities that are necessary for effective professional performance. Alternatively, mastering by a specialist of specific skills during performance of various specific activity components, increases tolerance to stress (Дубчак, 2014).

The common concept of tolerance to stress lays at the core of tolerance to professional stress and is understood by many researchers as a complex integrative system characteristic that determines person’s ability to withstand stress exposure or to cope with stressful situations, to transform them actively. Therefore, we can argue that tolerance to professional stress is a particular case of mental stability manifested under action of professional stress factors, the specificity of which is determined by a particular type of professional activity (Дубчак, 2014).

Generalization of the theoretical analysis results shows that the foundation for formation of tolerance to stress of future specialists with sociometry occupations is personal development during professional training, profession mastering and performance of professional activities. Therefore, formation of tolerance to professional stress is related to specialist’s personal development.

However, national psychological literature has not studied yet properly the influence of individual psychological characteristics and personal tolerance to stress of future specialists with sociometry occupations.

Locus of control over events occurring is understood by most psychologists as one of person’s social and psychological professional attitudes that define his/her attitude to other people and, accordingly, become regulators of interactions with them (Rotter, 1966).

Analysis of foreign studies shows that locus of control is one of the personality traits that have an impact on activities of specialists in a number of professions, including sociometry (Heszen-Niejodek & Ratajczak 2000; Łosiak, 2008; Ogińska-Bulik, 2006; Zubrzycka-Maciąg, 2013). Numerous studies show that an external locus of control makes professional activities more difficult, exposing professionals to stress, conflict and burnout, which is associated with high psychological expenses (Grzegorzewska, 2006; Litzke, 2007; Bartkowiak, 2009).

Researchers emphasize higher tolerance to stress of people with an internal locus of control. Externality, complicating the process of overcoming difficulties in professional activities, contributes often to development of diseases of psychogenic nature and reduces likelihood of success in chosen profession (Terelak, 2005).

An especially dangerous situation is when an emotionally “burned” specialist, experiencing a variety of stresses, shifts the blame for his/her psychophysical condition to others, for example, students. People with an internal locus of control are more active and exhibit higher willingness to overcome negative effects of stress, symptoms of which are noted by them. This means that internal locus of control can contribute to professional activity satisfaction (Bartkowiak, 2009; Terelak, 2005)

Object of the research: characteristics of tolerance to stress of future specialists with sociology occupations.

Aim of the research: to identify general and distinctive characteristics of tolerance to stress of future specialists with sociology occupations.

Participants of the research:

The empirical study involved 198 students of vocational schools and universities of Chernivtsi (Ukraine), including 113 university students, 85 students of vocational schools, which is respectively 57% and 43%.

The age of the investigated students is from 16 to 38 years ($M = 19,21$; $SD = 4,36$). The average age of university students ($20.60 + 5.23$) is significantly higher than that of vocational schools ($17,23 + 0,87$) ($p < 0,001$). 96 men and 102 women were among surveyed, which is respectively 48.5% and 51.5%.

The distribution of the studied as for their specialties, gender and types of educational organizations is presented in Table 1.

Table 1. Distribution of the studied students as for their specialties, types of educational organizations and gender

Indexes	Vocational school students			University students			
	1	2	3	4	5	6	7
N	27	26	32	30	28	30	25
%	14	13	16	15	14	15	13
Men	N	12	12	15	16	13	14
	%	44	46	47	53	46	47
Women	N	15	14	17	14	15	11
	%	28	17	26	24	27	22

Notes: Students: 1 - paramedics, nurses; 2 - resellers; 3 - waiters, bartenders; 4 - history teachers; 5 - lawyers; 6 - social pedagogues; 7 - psychologists.

We tried to cover the students of all academic years from the first to the fifth academic year in our study. The distribution by gender and academic years is presented in Table 2.

Table 2. Distribution by gender and academic years

Indexes	Academic year					Total
	1	2	3	4	5	
Men	45	12	17	9	13	96
Women	32	15	22	12	21	102
Total	77	27	39	21	34	198

Chi-square test confirmed homogeneity of student groups by gender, specialty and types of educational organization ($p \geq 0,05$; ni).

Methods of the research

The technique for quick diagnosis of psychological emotional (Копіна, Сулова & Заїкін, 1995) stress was used in the study as well as the personal questionnaire for diagnostics of subjective locus of control (Бажин, 1984).

Methods for diagnosis of psychological emotional stress include Reeder Stress Inventory for quick diagnosis of psychosocial stress (Копіна, Сулова & Заїкін, 1995) and diagnostics of related factors: health self-assessment; life satisfaction; satisfaction with living conditions; satisfaction with basic needs.

We used Reeder stress scale to assess students' levels of psychological emotional stress in interpersonal relations, while performing daily duties and training.

The study also used the personal questionnaire for diagnostics of subjective locus of control (Бажин, Голинкіна & Еткінд), intended to diagnose internal-external locus.

Checking of psychometric properties of the used techniques indicates their high reliability, specificity, sensitivity and validity.

Research data was processed applying methods of mathematic statistics: descriptive statistics (mean, std. deviation, frequencies), independent samples T-test, one-way ANOVA tests for independent groups.

Results and Discussion

Normality of data distribution was checked based on Kolmogorov-Smirnov test. The distribution of all scales is normal ($p > 0,05$).

Comparative analysis of students' levels of psychological emotional stress with Reeder Stress Inventory

The study results presented in Table 3 indicate that the highest indicators of psychosocial stress with Reeder Stress Inventory are shown by the students of the following vocations: paramedics/nurses, social pedagogues and resellers; the lowest ones are shown by history teachers, lawyers, psychologists, waiters/bartenders. It should be noted that the students with high levels of psychosocial stress can be attributed to those who need psychological help.

Table 3. Indicators of psychosocial stress of the students as for their professions and types of educational organizations

Indicators		Vocational school students			University students			
		1	2	3	4	5	6	7
Psychosocial stress	M	1,46	1,61	0,97	0,95	1,08	1,31	1,12
	σ	0,52	0,55	0,54	0,46	0,55	0,52	0,47

Note: see professions in Table 1.

The one-way ANOVA test for independent groups shows that there are statistically significant differences between groups of students enrolled for different specialties: $F(6,191) = 6,294$; $p < 0,001$. Post hoc tests Student-Newman-Keuls (S-N-K) also confirms the presence of significant differences ($p < 0,001$) between all groups of students.

Addition analysis includes comparison of the studied groups by types of educational institutions and gender (see Table 4, 5).

Table 4. Indicators of psychosocial stress of the students as for types of educational organizations

No	Indicators	Vocational school students	University students
1	Psychosocial stress	M	1,32
		σ	0,60
			1,11
			0,50

Based on the T-Student test, it was found that the levels of emotional stress of the studied groups differ greatly: $t(196) = 2,66$; $p < 0,01$; $d \text{ Cohena} = 38$. The research results show that psychosocial stress of university students ($M = 1,11$; $SD = 0,50$) is significantly lower than that of vocational school students ($M = 1,32$; $SD = 0,60$).

The frequency analysis of psychosocial stress dependence on gender shows that half of men (55%) are characterized by average levels of psychosocial stress, 37% have the low one and only 8% of men have the high level of stress.

A similar statistic was determined for women: 52% of female students have average level of emotional stress, the low one is characteristic for 43%, and the high level is for 5% only.

The highest level of psychological emotional stress was found for men – future resellers. This indicator shows the high level of psychosocial stress. Paramedics/medical brothers have the above-average stress level, but the students – waiters/bartenders and historians – have the low one.

As for women, the highest level of psychosocial stress is observed for future nurses and social pedagogues, who are characterized by average manifestations of stress. The lowest level of stress is observed for female students – historians, lawyers and waitresses, the male students have the same pattern.

Table 5. Indicators of psychosocial stress of the students as for professions and gender

Indicators			Vocational school students			University students			
			1	2	3	4	5	6	7
Psychosocial stress	men	M	1,29	2,00	0,79	0,95	1,00	1,00	1,00
		σ	0,38	0,27	0,49	0,37	0,45	0,49	0,14
	women	M	1,61	1,27	1,13	0,98	1,15	1,51	1,26
		σ	0,59	0,51	0,55	0,52	0,63	0,45	0,69

Note: see professions in Table 1.

It was established that the levels of psychological emotional stress of the studied groups of men and women differ statistically, $t(196)=-1,972$; $p < 0,05$; d Cohena = 0,28. For men, $M=1,12$; $SD=0,52$, but for women, $M=1,27$; $SD=0,58$. This means that men's level of psychosocial stress is significantly higher than the women's one.

Comparative analysis of satisfaction with life, living conditions and basic needs

Quantitative data characterizing satisfaction of students in the studied groups with life, living conditions and basic needs are given in Table 6.

Table 6. Students' satisfaction with life, living conditions and basic needs depending on professions and types of educational organisations

Indicators		Vocational school students			University students			
		1	2	3	4	5	6	7
Life satisfaction in general	M	6,85	7,23	6,75	9,03	10,46	8,33	7,36
	σ	3,86	4,18	4,45	4,25	3,88	3,47	5,70
Satisfaction with living conditions	M	60,15	57,73	55,31	57,30	54,93	53,07	48,00
	σ	6,32	6,47	6,83	4,90	7,44	5,76	5,00
Satisfaction with basic needs	M	45,91	48,00	46,72	45,93	47,11	43,73	40,96
	σ	4,63	3,73	4,41	4,63	4,04	5,50	5,85

Note: see professions in Table 1.

The table data show that modern Ukrainian university students as well as vocational school students are characterized by high levels of satisfaction with life, living conditions and basic needs despite the difficult social and economic condition in the country. The exception is students-psychologists, who are characterized by an average level of satisfaction with basic needs and living conditions.

Law students have the highest life satisfaction in general. In our opinion, this is due to their possibility to learn one of the most prestigious professions and it can also indicate psychological well-being and optimistic attitude. Future nurses/paramedics have high rates of satisfaction with living conditions, and high satisfaction with basic needs is characteristic for future historians and resellers, which can be an indicator of high quality of life.

The one-way ANOVA test for independent groups shows that there are statistically significant differences in levels between the groups of students enrolled in different specialties:

- Life satisfaction in general: $F(6,191) = 2,877$; $p < 0,05$;
- Satisfaction with living conditions: $F(6,191) = 10,443$; $p < 0,001$;
- Satisfaction with basic needs: $F(6,191) = 7,195$; $p < 0,001$;

We also compared the student samples on the base of types of educational institutions. Quantitative data on satisfaction shown by the studied students are presented in Table 7.

Table 7. Students' satisfaction with life, living conditions and basic needs depending on types of educational organisations

Indicators		Vocational school students	University students
Life satisfaction in general	M	6,93	8,83
	σ	4,14	4,43
Satisfaction with living conditions	M	57,59	53,53
	σ	6,79	6,68
Satisfaction with basic needs	M	47,06	44,54
	σ	4,01	5,49

Comparative analysis of the obtained data shows that university students have higher life satisfaction in general but lower satisfaction with living conditions and basic needs compared with vocational school students.

For all satisfaction scales, the groups of university and vocational school students differ statistically:

- Life satisfaction in general: $t(196)=3,073$; $p<0,01$; d Cohena=0,44;
- Satisfaction with living conditions: $t(196)=4,195$; $p<0,001$; d Cohena=0,59;
- Satisfaction with basic needs: $t(196)=3,737$; $p<0,001$; d Cohena=0,53.

Comparative analysis of the gender data (Table 8) shows that men have the highest rates as for all satisfaction scales, but found differences between men and women are not statistically significant.

Table 8. Students' satisfaction with life, living conditions and basic needs depending on their gender

No	Indicators		Men	Women
1	Life satisfaction in general	M	8,45	7,61
		σ	4,21	4,56
2	Satisfaction with living conditions	M	56,10	54,49
		σ	7,28	6,68
3	Satisfaction with basic needs	M	46,03	45,24
		σ	5,36	4,71

Comparative analysis of students' internality basing on G. Rotter technique

The results of locus of control survey are particularly interesting in our view. Quantitative data on the internality/externality ratio of students depending on their specialties are given in Tables 9, 10.

Table 9. Students' internality/externality depending on types of educational organizations (%)

Indicators	Vocational school students			University students			
	1	2	3	4	5	6	7
Externality	37,5	58	47	29	50	23	7
Internality	62,5	42	53	71	50	77	93

Note: see professions in Table 1.

The above table data show that students in the studied groups have mainly internal locus of control. It is particularly vivid for the students-psychologists, apparently due to specifics of their training. A high percentage of students with internal locus of control are found among social pedagogues, which also can be explained by specifics of their training, and students historians. Thus, the most important events in student' lives is the result of their own actions, they can manage them, and therefore feel their responsibility for these events and for their life in general.

We know that locus of control is universal in relation to all types of events and situations which a person has to face, that is, the same type of control characterizes person's behaviour in the case of failures and at achievements and this is equally applied to various spheres of social life.

Table 10. Student's internality depending on types of educational organizations

Indicators		Vocational school students			University students			
		1	2	3	4	5	6	7
Internality	M	22,96	22,65	23,25	25,45	22,43	24,68	28,50
	σ	3,19	3,81	2,78	5,04	3,92	4,10	3,59

Note: see professions in Table 1.

The fact is noteworthy that groups of students – future lawyers and resellers – have more pronounced external locus of control that characterizes them as people who do not see correlation between their actions and significant events of their lives, do not consider themselves able to control event development. Synthesis of various empirical data leads to the conclusion that these students may have problems in performance of their professional duties, especially if they belong to socioeconomic professions (Grzegorzewska, 2006; Ogińska-Bulik, 2006).

The above differences are statistically significant, as evidenced by the results of one-way ANOVA: $F(6,191)=8,405$; $p<0,001$. Post hoc test Scheffe ($p<0,001$) shows that the groups of psychologists and historians differ statistically significantly from the other surveyed groups.

Let us analyse the dependence of internality on gender and types of educational institutions (Tables 11, 12).

Table 11. Quantitative indicators of locus of control depending on types of educational organizations and gender (%)

Indicators		External	Internal
Type of educational organizations	Vocational school	48	52
	University	28	72
Gender	Men	42	58
	Women	31	69

As we can see from the above table, the university students have mainly internal locus of control, vocational school students have external locus of control. These differences are statistically significant: $t(196) = -3,722$; $p < 0,001$; d Cohena = 0,53. For university students, $M = 25,20,98$; $SD = 4,67$, for vocational school students, $M = 22,98$; $SD = 3,22$.

Table 12. Indicators of internality depending on types of educational organizations and gender

Indicators			Internality
Type of educational organizations	Vocational school	M	22,98
		σ	3,22
	University	M	25,20
		σ	4,67
Gender	Men	M	24,07
		σ	4,51
	Women	M	24,47
		σ	4,04

Comparative analysis depending on gender shows that the vast majority of men and women have more pronounced internal locus of control, and differences between genders are not statistically significant.

Comparative analysis of locus of control with psychological emotional stress for the surveyed students

The results of comparative analysis of locus of control with psychological emotional stress for the surveyed students are particularly interesting in our view. Quantitative indicators of these parameters are given in Table 13.

Table 13. Dependence of psychological emotional stress on locus of control

Indicators		External	Internal
Psychosocial stress	M	1,20	1,12
	σ	0,58	0,25
Life satisfaction in general	M	7,76	8,32
	σ	4,37	4,28
Satisfaction with living conditions	M	54,72	56,08
	σ	7,08	6,52
Satisfaction with basic needs	M	45,02	46,39
	σ	5,39	4,24

According to the results presented in Table 13, students with internal locus of control have a lower value of psychosocial stress compared with students with external locus of control. These differences are statistically significant ($p < 0,01$).

Also for students with internal and external locus of control, there are statistically significant differences as for the levels of life satisfaction in general, satisfaction with living conditions and basic needs. Thus, students with internal locus of control are more satisfied with life in general, living conditions and basic needs compared with students with external locus.

Analysis of variance shows that internal locus of control in comparison with external locus can be a factor that increases students' tolerance to stress. Statistically significant differences between groups of students with internal and external locus of control are determined for the levels of:

- Psychosocial stress: $F(18, 179)=8,405$; $p<0,01$.
- Life satisfaction in general: $F(18,179)=2,085$; $p<0,01$;
- Satisfaction with living conditions: $F(18,179)=2,25$; $p<0,01$;
- Satisfaction with basic needs: $F(18,179)=3,61$; $p<0,001$.

Conclusions

The study performed with students – future specialists of different sociometry professions – determines general and distinctive features of tolerance to stress related to future professional activities, types of educational institutions and gender.

Modern Ukrainian university students as well as vocational schools students are characterized by mainly high level of satisfaction with life, living conditions and basic needs.

University students have higher life satisfaction in general but lower satisfaction with living conditions and basic needs compared with vocational school students.

The levels of psychosocial stress are lower in university students than in vocational school students; men have higher stress than women. In fact, students with high levels of psychosocial stress may need psychological help.

University students have mainly internal locus of control, but vocational school students have external locus of control. Students with internal locus of control compared to others are more satisfied with life in general, living conditions and basic needs. Students with internal locus of control are characterized by lower levels of psychosocial stress compared with students with external locus of control.

So, we can assume that the internals have higher tolerance to stress and are more confident, calmer and friendlier compared to the externals. They are distinguished by a more positive system of attitudes to the world and more pronounced awareness of meanings and life goals.

Thus, internal locus of control may contribute to a greater sense of satisfaction with life, and, in the future, with professional activities.

The results of this study are useful for applied psychologists of universities and secondary schools in their work with students – future specialists with sociology occupations.

References

1. Bartkowiak, G. (2009). *Człowiek w pracy: od stresu do sukcesu w organizacji*. Warszawa: Polskie Wydawnictwo Ekonomiczne.
2. Heszen-Niejodek, I., & Ratajczak, Z. (2000). *Człowiek w sytuacji stresu: problemy teoretyczne i metodologiczne*. Katowice: Katowickie Wydawnictwo Psychologiczne
3. Grzegorzewska, M. (2006). *Stres w zawodzie nauczyciela: specyfika, uwarunkowania i następstwa*. Kraków. Wydawnictwo Uniwersytetu Jagiellońskiego.
4. Litzke Sven, M. (2007). *Stres, mobbing i wypalenie zawodowe*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
5. Łosiak, W. (2008). *Psychologia stresu*. Warszawa: Wydawnictwo Akademickie i Profesjonalne.

6. Ogińska-Bulik, N. (2006). *Stres zawodowy w zawodach usług społecznych. Źródła. Konsekwencje. Zapobieganie*. Warszawa: Wydawnictwo Akademickie i Profesjonalne.
7. Terelak, J. *Stres organizacyjny. Koncepcje, przyczyny, symptomy i sposoby radzenia sobie*. Warszawa: Wydawnictwo Akademickie i Profesjonalne.
8. Zubrzycka-Maciąg, T. (2013). *Psychospołeczne uwarunkowania stresu nauczycielek szkół podstawowych i gimnazjów*. Lublin: Wydawnictwo Akademickie
9. Бажин, Е., Гольнкина, Е., & Эткинд А. (1984). Методы исследования уровня субъективного контроля. *Психологический журнал*, 3, 152-162
10. Бохан, Т. (2008). *Культурно-исторический подход к стрессу и стрессоустойчивости: автореф. дис. на соискание ученой степени доктора психол.наук*. Томск.
11. Дубчак, Г. (2014). Розуміння професійної стресостійкості у психологічній літературі. In *Науковий вісник Чернівецького університету*, 649.
12. Кокун, О. (2012). *Психологія професійного становлення сучасного фахівця*. Київ: ДП Інформ.-аналіт. агентство.
13. Копина, О., Сулова, Е., & Заикин, Е. (1995). Экспресс-диагностика уровня психоэмоционального напряжения и его источников. *Вопросы психологии*, 3, 119-132
14. Крайнюк, В. (2007). *Психологія стресостійкості особистості*. Київ: Ніка-Центр.
15. Хуторная, М. (2007). *Развитие стрессоустойчивости студентов в условиях интеллектуальных испытаний: автореф. дис. на соискание ученой степени доктора психол.наук*. Тамбов.
16. Щербатых, Ю. (2006). *Психология стресса и методы коррекции*. СПб.: Питер.

CHARACTERISTICS OF TOLERANCE TO STRESS OF FUTURE SPECIALISTS WITH SOCIONOMY OCCUPATIONS

Summary

Halyna Dubchak
The Maria Grzegorzewska University, Poland

Insufficient attention paid to the issue of training of future specialists with sociometric occupations whose professional activities are one of the most psychologically intense kinds of labour activities necessitates this study.

National psychology today has a limited number of works devoted to empirical studies of certain aspects of training of specialists of different professions, which clearly demonstrates the absence of attention paid to this issue by researchers.

In order to identify general and distinctive characteristics of tolerance to stress of future sociometry professionals of various occupations, the empirical study was carried out and covered 198 students in Chernivtsi (Ukraine). 113 students were from universities, and 85 persons were from vocational school; 96 men and 102 women participated in the study. The study used methods for quick diagnosis of psychological emotional stress (Копина, Сулова, & Заїкин, 1995) and the personal questionnaire for diagnostics of subjective locus of control (Бажин, 1984).

The study carried out with students – future specialists of different sociometric professions – determines general and distinctive characteristics of tolerance to stress related to future professional activities, types of educational institutions and gender.

It was revealed that modern Ukrainian university students as well as vocational school students are characterized by mainly high level of satisfaction with life, living conditions and basic needs.

However, university students have higher life satisfaction in general but lower satisfaction with living conditions and basic needs compared with vocational school students.

The levels of psychosocial stress are lower in university students than in vocational school students; men have higher stress than women. In fact, students with high levels of psychosocial stress may need psychological help.

University students have mainly internal locus of control, but vocational school students have external locus of control. Students with internal locus of control compared to others are more satisfied with life in general, living conditions and basic needs. Students with internal locus of control are characterized by lower levels of psychosocial stress compared with students with external locus of control.

So, we can assume that the internals have higher tolerance to stress and are more confident, calmer and friendlier compared to the externals. They are distinguished by a more positive system of attitudes to the world and more pronounced awareness of meanings and life goals. Thus, internal locus of control may contribute to a greater sense of satisfaction with life, and, in the future, with professional activities.