SUBJECTIVITY AND PSYCHOLOGICAL STRESS OF STUDENTS IN MULTIETHNIC ENVIRONMENT OF UNIVERSITY

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Abstract

The paper is devoted to educational process optimization in a multiethnic environment of the university through reduction of destructive distress experiences of students and increasing their subjectivity. Psychological stability and resilience are considered as personal resources in the paper. Much attention is paid to subject identity as a key characteristic of personal subjectivity that resides in the ability to mobilize and distribute one’s mental reserves, to achieve self-identity in activities, to properly manage the situation, to strive for satisfaction with the result. The research involves 40 residents of Russia and 25 residents of Syria, Turkmenistan, Ukraine, Moldova, aged 18–22, studying at Adyghe State University. Multiple analyses and data rankings concluded that the main psychological stressors affected students in an innovative educational multi-ethnic environment of the university in the framework of international cooperation include negative impact caused by poorly organized activity, content, form, type of activity, personal characteristics of educational agents, workplace organization and information overload. However, the impact of these stress factors on Russian and international students is different. An important subjective characteristic of students is a subject identity embodied in students’ awareness of personal goals, the ability to take decisions under conditions of uncertainty and lack of information, the ability to overcome anxiety and depression. Development of subject identity prevents the internal tension under stress, strengthens stress tolerance and resilience of students. The article is useful for researchers of higher education challenges, university staff, for analysing and organizing the educational process in a multi-ethnic environment.

Keywords: Multiethnic, educational, environment, subjectivity, psychological, stress.
1. Introduction

Modern system of higher education in Russia and other countries, whose policies are in line with the Bologna process, is geared to train specialists ready for an effective professional activity in a rapidly changing world. Those who are able to determine, build and realize their personal capacity and potential of the environment combined with social liability are in great demand in all spheres of society.

Cutting-edge educational technologies contribute to the differentiation and individualization of students' learning activities, the implementation of individual learning paths and have fundamentally new characteristics:

- non-linearity, since professional knowledge and expertise are not just accumulated consistently, abiding by a predetermined plan, but also arise spontaneously, subjectively, and unpredictably because students discover them on their own, monitored by a teacher;
- incompleteness and openness, due to the fact that teaching material is delivered in the form of problem tasks, and complemented by everyday experience and knowledge of students;
- inconsistence and instability caused by the fact that target information is variable, changeable and ever evolving;
- relativity of learning outcomes, because they are dependent on chances, spontaneous and chaotic, uncontrollable or poorly managed processes of personal development;
- knowledge is crucial for a student and exists, provided that it becomes subjective, i.e. personally significant;
- education does not provide ready-made "recipes" of knowledge and patterns of behavior, it offers a variety of their options, based on the natural human need to make a choice (Gusakovsky, 2004).

The above mentioned features, when properly applied, are highly effective. They develop the subjectivity of educational agents, i.e. the ability to adequately perceive their mental resources, rationally distribute them and manage the circumstances of their activities (Kovaleva, 2005). S.N. Petrosyan and Z.I. Ryabikina noted that a person is a living functioning integrity, incorporated in daily routine and having its own existence (Petrosyan & Ryabikina, 2016). Therefore, such an active position requires constant high activity and tension and at some moment can turn into a stress factor.

An additional stressor can be the participation of universities in the implementation of international educational programs. Of course, international activity is one of the leading activities of a modern university and is considered as one of the strategic ways to expand its educational space, while enhancing the multi-ethnicity of the educational environment. E.A. Pugacheva, defining the multi-ethnic educational environment of a university, emphasizes that it is a spiritually rich atmosphere of business and interpersonal relations, which triggers the outlook, style of thinking and behavior of agents involved, and encourages the need to become a part of national and universal spiritual values. (Pugacheva, 2008). In addition, a multi-ethnic educational environment creates conditions for the transmission of culture and the development of a new culture. As a result, students from different states, cultures, and ethnic groups get closer to each other;
however, differences remain including racial-anthropological, linguistic, and ethno-cultural. (Zhade, Kukva, Lyausheva, & Shadje, 2006; Shaov & Nehay, 2015).

On the other hand, the expansion of the ethnic diversity of student groups, although it has intensified the intercultural communication of students, has made many of them simultaneously shape and apply socio-psychological and communicative competence in interpersonal communication within international cooperation. Some more efforts are required for the awareness of ethnic identity, establishment and assistance in tolerant relations, empathy, detection and negotiation of destructive stereotypes and attitudes in relationships, formation of common principles, values, goals, rules and patterns of behavior (Tuchina, 2015).

It is possible to identify the integrated factors of psychological stress in students in an educational multi-ethnic environment within the framework of international cooperation:

- socio-psychological factor (ability to cope with stress, being in different political, socio-cultural circumstances, roles, statuses and positions);
- psychological factor (beliefs, enthusiasm, experience, control, risk acceptance, ethno-cultural stereotypes);
- physiological factor (congenital vulnerability of the organism, susceptibility to diseases, features of thinking processes).

2. Problem Statement

The challenge is that modern society sets high demands on a graduate. However, serious stresses arise within the educational environment of the university that impede encouragement of students for self-study, affect their creativity, normal human life. To raise the awareness of students’ capabilities to handle stressors posed by the educational environment and prevent psychological stress, it is important to investigate the mental reserves of a student related to such personal characteristics as psychological stability and resilience.

A. Ya. Antsupov defines the psychological stability of a person as the ability to hold up the optimal functioning of a psyche in frustrating and stressful situations (Antsupov & Shipilov, 2016). L. V. Kulikov, in turn, emphasizes that psychological stability is a subjective condition for individual well-being, stress reduction and overcoming difficulties (Kulikov, 2004). Psychological stability of a person is shaped through the disclosure of his/her internal mental reserves in the motivational sphere, the use of emotional and role-regulation methods and the means of health psychology.

N. M. Volobueva regards resilience as a resource to reduce the stressful effects of an innovative society. Its components – involvement, control and risk taking – help a person find useful and valuable things for himself, contribute to a sense of control over his own life (Volobueva, 2012).

According to Fominova, resilience can be embodied in various forms – as a psychological phenomenon, resource, personal trait, integral ability, personal outfit, psychological trait, dynamic process, integral personal entity, i.e. a complex psychological entity that contributes to the successful coping with stressful situations, effective self-regulation of unstable states, and optimal living of one’s own life (Fominova, 2012).
It is the personal qualities that are dominant, leading in such phenomenon as resilience. In foreign psychology, the phenomenon of vitality, resilience is associated with various structures of a human psyche: at the level of psycho-physiological functioning, at the psychological level, at the level of entity manifestations.

Russian authors distinguish two components in the viability of a person:

- **content component** as the integration of positions, development of values, awareness of interests, clarification of relations;
- **practical component** as a way of action, skills, habits, development of resources.

D.A. Leontyev considers resilience as a key personal variable that mediates the influence of stress factors (including chronic ones) on somatic and mental health, and personal success alike (Leontyev & Rasskazova, 2006). A subjective identity of a person can serve as an example of such experience and knowledge in the educational process. It embodies in the ability to mobilize and distribute one’s mental, physical and emotional reserves, to achieve self-identity in cognitive activity, properly manage the situation, strive for satisfaction with the result, success, etc. This shapes a subjective personal outfit and the skills to apply it (Kovaleva, 2005).

### 3. Research Questions

Subject identity considered as the ability to establish implications and visions of one’s personal activities, choose the methods and measures of their implementation in line with the situation, has several levels:

- **energetic**, experienced as the amount of necessary mental and physical efforts to perform a particular activity. It is embodied in the commitment (attitude) of a student to be more or less active, make appropriate efforts to master new necessary practices, skills, educational and (or) professional commands;
- **operational**, experienced as a focus on one’s personal capacity, can have both a positive form (I can, I can cope, I am self-confident), and a negative one (I can’t, It will not work, I’m not self-confident). It requires certain behavioral patterns “from above” and can be triggered and strengthened in a competitive environment;
- **tactical (target)**, commitment and ability to determine the goal, ability to use one’s creative initiatives. It is embodied in creativity and can contain two dimensions: positive/constructive and negative/destructive;
- **semantic**, containing the focus on the search and creation of one’s own vision of educational activities, expressed in mobility, flexibility, openness of one’s ground. At this level, a student proves his/her talents as a policy-maker in their studies and this identity sets out the corresponding claims (Kovaleva, 2005; Kovaleva, 2014).

With this in view, it can be assumed that the more a student is interested in fulfilling learning roles and functions, the more active, creative and effective his/her individual activity in this direction becomes.
The nature of activity reflects the degree of his/her subjectivity and the level of subject identity – energetic, operational, target or semantic.

4. Purpose of the Study

The purpose of the study is to determine the possibilities for optimizing the educational process in the conditions of a multi-ethnic environment of the university in the framework of international cooperation by reducing destructive distress experiences of students and increasing their subjectivity.

Objectives are:

1. To detect psychological stress factors of students emerging and developing in the innovative educational environment of the university.
2. To determine the content of subjective personal characteristics of students, which cause their distress experiences.
3. To carry out a comparative analysis of subject identity and distress experiences by Russian and international students.
4. To elaborate guidelines to reduce distress experiences of educational agents and increase their subjectivity.

The hypothesis of the study is the assumption that subject identity prevents the emergence of internal tension in a stressful situation, increases the creative ability of students to adapt to a dynamic multi-ethnic educational environment. It is the key to subjectivity as the ability to adequately assess their mental reserves, properly distribute and manage their activities.

5. Research Methods

The study involved 65 students of the Adyghe State University at the age of 18–22 years enrolled in undergraduate programs in Advertising and Public Relations, Psychology, Social Pedagogy, Philology and Tourism in the framework of international cooperation (40 residents of the Russian Federation and 25 residents of Syria, Turkmenistan, Ukraine and Moldova).

The sample includes study groups with different ratios of Russian and international students:

- the number of Russian students prevails;
- the number of international students prevails;
- the number of Russian and international students is equal.

For identification, processing and interpretation of results, the following methods were applied, namely: theoretical analysis, questionnaire entitled Self-assessment of stressful impacts, average statistical, correlation, comparative analyses and rankings.

The questionnaire features theoretical insights into the origin and factors of psychological stress by V.A. Bodrov, E.P. Ermolaeva, L.A. Kulikov, Yu.V. Shcherbatykh (Bodrov, 2000; Bodrov, 2006; Bodrov, 2012; Ermolaeva, 2007; Kulikov, 2004; Shcherbatykh, 2006). It presents five integrated, potential stress
Factors, each of which includes several indices assessed by respondents for the presence of anxiety and tension. They involve, inter alia, the indicators that reflect the desire of a person to intertwine the components of the educational environment with their inner sense. They influence the decisions taken by individuals, the choice of actions, behaviors, etc. They can also be attributed to indicators of subject identity, in the text they are in italics.

**Factor 1.** “Workplace organization” unites seven indicators: indoor climate, inconvenient timetable, overtime, monotonous work (activity), insufficient workload, study safety, organization of a personal study place.

**Factor 2.** “Content of activity” also involves seven indicators: awareness of learning objectives (clarity, inconsistency, reality), awareness of personal goals (clarity, inconsistency, reality), social liability, role status (role conflict and role ambiguity), professional expertise, level of knowledge, the ability to render creative abilities.

**Factor 3.** “Organization of educational activity” also includes seven indicators: organizational changes, organization management, personnel policy, specialization and division of labor, violation of subordination, improper hierarchical establishment of relations, non-coordinated information flows.

**Factor 4.** “Information overload” contains five indicators: information overload, tight time constraints, decision making with a high degree of liability, uncertainty and lack of necessary information, frequent or unexpected changes in information parameters.

**Factor 5.** “Personal characteristics” combines five indicators: the level of emotional lability and self-control, rationalization of one’s motives, anxiety proneness and depressive reactions, openness to innovations, willingness to learn.

The respondents were asked to rate the intensity of tension they experienced for each of these 28 stress indicators on a scale from 1 (no tension) to 5 points (very high anxious tension). For the analysis, the tension scale comprises five levels: no tension (0–1 point); low tension (1–2 points); medium tension (2–3 points); tension is above average (3–4 points); high level tension (4–5 points). The findings were processed, arranged and analyzed through average statistical, correlation and comparative analyses, grouping and ranking.

The **average data analysis** determined the group tension indices for each of the stated factors and their indicators.

The **correlation analysis** of data for each group of respondents through Spearman rank correlation was used to identify significant correlations, when r corresponded to the level of statistical significance p ≤ 0.05 and strong, high, significant correlations p ≤ 0.01 (Sidorenko, 2000). For a group of international students composed of 25 people, certainty and high significance index is r ≥ 0.49 (p ≤ 0.05) and r ≥ 0.51 (p ≤ 0.01). Accordingly, for a group of Russian students composed of 40 people, the same index is r ≥ 0.31 (p ≤ 0.05) and r ≥ 0.40 (p ≤ 0.01) (Sidorenko, 2000).

The **comparative analysis** of index correlation relationships that reflect subjective personal characteristics, as well as grouping and ranking determined the hierarchical structure of stress factors and identified the correlation pleiades in each group.
6. Findings

The average data analysis in the group of international students revealed only three average tension indices: information overload; tight time constraints; anxiety proneness.

Eighteen tension indices were identified in the group of Russian students. A third had indicators above the average level: uncertainty, lack of necessary information; tight time constraints; information overload; decision making with high liability; professional expertise, level of knowledge; anxiety proneness.

The comparative findings of stress correlations posed by the educational environment are presented in line with the criteria in Tables 01-04.

Table 01. The rank distribution of stress factors upon the number of significant correlations

<table>
<thead>
<tr>
<th>No</th>
<th>International students</th>
<th>Russian students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>negative impact of poorly organized activity (18 correlations)</td>
<td>content, form, type of activity (21 correlations)</td>
</tr>
<tr>
<td>2</td>
<td>content, form, type of activity (16 correlations)</td>
<td>information overload (20 correlations)</td>
</tr>
<tr>
<td>3</td>
<td>personal characteristics (13 correlations)</td>
<td>negative impact of poorly organized activity (17 correlations)</td>
</tr>
<tr>
<td>4</td>
<td>workplace organization (10 correlations)</td>
<td>personal characteristics (13 correlations)</td>
</tr>
<tr>
<td>5</td>
<td>information overload (7 correlations)</td>
<td>workplace organization (10 correlations)</td>
</tr>
</tbody>
</table>

Table 02. The rank distribution of stress factors upon the intensity of common correlation relationship

<table>
<thead>
<tr>
<th>No</th>
<th>International students</th>
<th>Russian students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>content, form, type of activity (24 points)</td>
<td>content, form, type of activity (30 points)</td>
</tr>
<tr>
<td>2</td>
<td>negative impact of poorly organized activity (23 points)</td>
<td>information overload (25 points)</td>
</tr>
<tr>
<td>3</td>
<td>personal characteristics (18 points)</td>
<td>negative impact of poorly organized activity (22 points)</td>
</tr>
<tr>
<td>4</td>
<td>workplace organization (10 points)</td>
<td>personal characteristics (17 points)</td>
</tr>
<tr>
<td>5</td>
<td>information overload (9 points)</td>
<td>workplace organization (12 points)</td>
</tr>
</tbody>
</table>

Table 03. The rank distribution of stress factors upon the intensity of internal correlation relationships

<table>
<thead>
<tr>
<th>No</th>
<th>International students</th>
<th>Russian students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>personal characteristics</td>
<td>personal characteristics</td>
</tr>
<tr>
<td>2</td>
<td>negative impact of poorly organized activity</td>
<td>information overload</td>
</tr>
<tr>
<td>3</td>
<td>content, form, type of activity</td>
<td>content, form, type of activity</td>
</tr>
<tr>
<td>4</td>
<td>information overload</td>
<td>negative impact of poorly organized activity</td>
</tr>
<tr>
<td>5</td>
<td>workplace organization</td>
<td>workplace organization</td>
</tr>
</tbody>
</table>

The ranks were summed up for each factor. As a result, a hierarchy of potential stress factors of the educational environment was made up for each group of respondents. It is presented in Table 04.
**Table 04.** Hierarchy of potential stress factors

<table>
<thead>
<tr>
<th>No</th>
<th>Total</th>
<th>International respondents</th>
<th>Total</th>
<th>Russian respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>negative impact of poorly organized activity</td>
<td>5</td>
<td>content, form, type of activity</td>
</tr>
<tr>
<td>2</td>
<td>6.5</td>
<td>content, form, type of activity</td>
<td>6</td>
<td>information overload</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>personal characteristics</td>
<td>9</td>
<td>personal characteristics</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>workplace organization</td>
<td>10</td>
<td>negative impact of poorly organized activity</td>
</tr>
<tr>
<td>5</td>
<td>15.5</td>
<td>workplace organization</td>
<td>15</td>
<td>workplace organization</td>
</tr>
</tbody>
</table>

The correlation of stress indicators in the educational environment revealed correlation pleiades, including subject identity indicators that are presented in Tables 05-06.

**Table 05.** Correlation pleiades in a Russian group

<table>
<thead>
<tr>
<th>No</th>
<th>Subject indicator</th>
<th>Content of a pleiade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Awareness of personal goals</td>
<td>awareness of learning objectives, social liability, professional expertise, knowledge; emotional lability and self-control; role status, role conflict and role ambiguity, violation of subordination, improper hierarchical establishment of relations, tight time constraints, decision making with a high degree of liability, rationalization of one’s motives, willingness to learn; information overload</td>
</tr>
<tr>
<td>2</td>
<td>Need to take decisions under conditions of uncertainty or lack of information.</td>
<td>information overload, decision making with a high degree of liability, social liability, awareness of personal goals (clarity, inconsistency, reality), awareness of learning objectives</td>
</tr>
<tr>
<td>3</td>
<td>Anxiety proneness and depressive reactions.</td>
<td>willingness to learn, decision making with a high degree of liability, information overloads, rationalization of one’s motives, self-control</td>
</tr>
</tbody>
</table>

**Table 06.** Correlation pleiades in international group

<table>
<thead>
<tr>
<th>No</th>
<th>Subject indicator</th>
<th>Content of a pleiade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Awareness of personal goals</td>
<td>awareness of learning objectives, social liability, professional expertise, knowledge; emotional lability and self-control, indoor climate, organization of a personal study place, non-coordinated information flows</td>
</tr>
<tr>
<td>2</td>
<td>Need to take decisions under conditions of uncertainty or lack of information.</td>
<td>Information overload, frequent or unexpected changes in information parameters</td>
</tr>
</tbody>
</table>

7. Conclusion

The findings complement the studies conducted by the team of the Center for Social and Psychological Problems of the Research Institute for Complex Problems at Adyghe State University in 2012-2013 within the project of the Ministry of Education of the Russian Federation No. 6.1292.2011
Psychological stability of the university in the context of the modernization of education. They show that an important role in the formation of subjectivity is played by personal identity realized in the activity. It is experimentally proven that important components of the psychological stability of an individual are its subject identity, uncertainty tolerance, emotional distress and involvement in innovation activity (Kovaleva, 2014).

The identified correlations correspond with the findings of the research that if a student is positive about the content and methods of his/her learning activity, he/she is actively and creatively involved in the activity, taking on the position of a strategist or tactic. In this case, he/she is more resilient to training loads, fatigue and professional stress (Kovaleva, 2005).

It was confirmed once again that a student who perceives learning activities as an imposed, alien system, has to deal with a tough situation that under certain conditions can turn into a crisis. The basis for alienation is a negative attitude to professional roles and functions, lack of personal sense, motivation to master the content and methods of specialist training. The perception of learning process as forced can lead to frustration and irritation that, if being long-term and stable, can turn into aggression, conflict, depressive states. In this case, there is a risk of a decline in activity, apathy, which qualitatively lowers the subjective capabilities, the effectiveness of the activity as a whole, creating a threat not only to study process, but also to personal security (Kovaleva, 2014).

The scientific novelty embraces the results of a comparative analysis of distress experiences (tensions) of Russian and international students in a multi-ethnic educational environment in the framework of international cooperation.

Russian students experience greater mental stress compared with international students, as they are subject to stressful impacts of a much larger number of learning factors. Nearly all of these factors are linked with the personal subjective characteristics and affect the performance of students. Analysis of individual data show that there are some students in the group who are currently experiencing tension corresponding to a high level of stress, as well as those whose level of tension corresponds to the average (optimal) parameters that support mental activity as part of successful performance.

The individual feedback of some international respondents signifies the absence of mental tension and stress. This may signal that they ignore their mental reserves endeavoring to overcome regulatory obstacles (tasks) due to the lack of such tasks, their subjective simplification, or lowered learning requirements thanks to some privileged position.

The correlation of stress indicators allowed us to identify several stress problems associated with the subject identity of the students, to describe their content, similarities and differences between Russian and international students:

- Stress problem 1. Awareness of personal goals (clarity, inconsistency, reality).
- Stress problem 2. Uncertainty and lack of necessary information.
- Stress problem 3. Anxiety proneness and depressive reactions.

All the three stress problems contain subject identity indicators, therefore subject identity truly prevents the emergence of internal tension in a stressful situation, increases the creative ability of students to adapt to a dynamic multi-ethnic educational environment. It is the key to subjectivity as the ability to
adequately assess their mental reserves, properly distribute and manage their activities, which justifies the hypothesis.

The main factors for the emergence and development of psychological stress of students in an innovative educational multi-ethnic environment of the university when implementing international cooperation programs are: the negative impact of activity arrangement, content, form, type of activity, personal characteristics of educational agents, workplace organization, information overload. However, the impact of these stress factors on Russian and international students is different.

All students, to a greater or lesser extent, face the problems related to the embodiment and realization of themselves as subjects of the educational system. Many of them do not always understand personal goals and learning objectives. They cannot properly and effectively organize themselves and streamline their activities and resources. As a result, they experience mental tension and stress.

An important subjective characteristic of students, that cause distress experiences, is a subject identity embodied in the awareness of personal goals, the ability to take decisions under conditions of uncertainty and lack of information, the ability to overcome anxiety and depression. The development of subject identity prevents the internal tension under stress, strengthens stress tolerance, resilience of students.

In order to overcome the emerging problems of educational activity, create optimal patterns of successful professional behavior, taking into account the ethnocultural characteristics of students, it is important to provide group and individual support for students. When monitoring them, it is necessary to use interactive teaching methods that shape the ability to create and use their own personal capacity of an educational agent through self-design, reflection, self-correction, search for alternatives that increase stress tolerance and vitality of a person.

Acknowledgments

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