Freshmen’s adaptive resources to the university environment as a factor of sustainable development in the social sphere

Victoria Voronaya\textsuperscript{*}, Evgeny Pronenko\textsuperscript{1}

\textsuperscript{1}Southern Federal University, 344006 Rostov-on-Don, Russia

Abstract. Increasing the adaptive resources of first-year students is especially important, because it makes it faster and easier to get involved in the learning process and start mastering professional skills. We have considered adaptation from the point of view of the meaningful sphere of person and ontological security. We used «Method of Research of Students Adaptability in the Higher Educational Establishment» (T.D. Dubovitskaya, A.V. Krylova), «Personality life position» (PLP) (D.A. Leontiev), «Test of meaning-life orientations» (MLO) (D.A. Leontiev), psychometric method «Ontological security» (OS(PM)) (N.V. Kopteva). Significant positive correlations were found between general meaningfulness of life, general ontological security and level of adaptability. The most significant medium strength correlations with the scale «Adaptation to the study group» were obtained with the following scales: «Process of life» of the MLO, «Harmony with Life» of the PLP, «Vital contacts with the world» of the OS(PM). For the scale «Adaptation to the educational activity» medium strength significant correlations were obtained with the scales: «Purpose in life» and «Locus of control - I» of the MLO. In the discussion of the results we indicate the consistency of our results with the available results. It confirms the importance of using meaningful education methods.

1 Introduction

1.1 Ontological problems of student age

The ontological status of student age implies a certain level of tension of students in their intrapersonal relationships and in their meaningful sphere. At this time, a system of life guidelines, plans and goals is being built. Students try to entry into independent life. Misunderstanding of the goals of life, self-search and entry into a fundamentally new environment require high adaptive resources of the individual. It is noted that some students may have a mismatch between their past life, before the university, and the current one, in university conditions, so we should study the adaptation to make it easier for students. Students may have fears of growing up and independence, feelings of losing theirselves, doubts in choosing a profession and they may regret about their career choice [1].

\textsuperscript{*} Corresponding author: voronaya@sfedu.ru

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There are a number of other problems, for example, restructuring of the Self-concept of personality due to the discrepancy between the real results and the success of learning, as well as the experience of interaction with classmates and teachers, ideas about the ideal may also be relevant [2]. Students also note uncertainty in successful employment after university and, in general, notice blurred prospects for further life. Simply put, they do not see the learning goals [3]. Relieving actualizing difficulties of self-determination [4] and self-search requires elaboration by influencing the meaningful sphere of students.

So, student age is unique from an ontological point of view. Considering the above, it is interesting to analyze how the meaning-life sphere of a person is connected with adaptation to university conditions.

1.2 The life position of the individual (in Test «Personality life position» (PLP))

The life position of the individual is understood as the attitude of a person to his own life. It also includes attitudes to everything that connects the «subjective» with the «objective», the person with the world. The self-regulating activity of the subject and reflexivity to one's own being form an optional attitude of «the personality as a conscious self-determining subject to that in himself and his own life that proceeds involuntarily, being conditioned by external and internal factors» [5], and the subject's attitude to the objective in himself. The active, subjective attitude of the individual to himself provides the necessary basis for the possibilities of managing life and activity. The questionnaire «Personality life position» includes 12 statements arranged in 3 scales: «Harmony with life», «Awareness of life» and «Active life position». The scale of «Harmony with life» indicate the perception of the correspondence of the lived life to the essence of the subject. «Awareness of life» scale reflect a developed level of reflection, understanding by the subject of his motives and goals. And finally, the «activity of the life position separates the poles of the question «Am I living or is my life living?» and is linking with the locus of control.

1.3 Meaning-of-life orientations (in Test of meaning-life orientations» (MLO))

The meaning-life sphere, being decisive for the conscious activity of an individual, is described within the framework of Leontiev's concept by the following subsystems [6]:

1. Goals in life (purpose of life). It shows the degree of the presence of goals and plans for the future in a person's life. Goals make existence temporary perspective, give vector and direction to life. Goals provide the meaningfulness of everyday existence and the ontological significance of life.

2. The process of life (interest and emotional saturation). It is connected with a person's perception of everyday life as interesting, emotionally intense and meaningful. High satisfaction with the process of life allows person to get pleasure from everyday activity.

3. The effectiveness of life (satisfaction with self-realization) reflects the perception of productivity and the sense of meaningfulness of the previous life, the vector of attitudes to past experience.

4. The locus of control – «I». This scale refers to self-attitude and self-confidence, to the awareness of freedom of choice and the ability to build a life according to the internal structure. It reflects the level of responsibility of the individual for his life.

5. The locus of control – «Life» (controllability of life) reflects the belief in the ability to influence the course of life by making decisions and their implementation. It reflects how much a person feels in control of life.
1.4 Ontological security

The theoretical concept of ontological security-insecurity is formulated in the works of R. Laing and is analyzed in the researches of N.V. Kopteva [7 - 9]. It appeals to «a person's experience of himself in the world»; it is associated with an existential need in connection with the world and people. Ontological security can be briefly defined as a person's experience of himself and his world. Ontological security presupposes treating other people and objective parts of reality «as oneself». The integral, embodied «Self» has supports in itself and the world, preserving autonomy and at the same time connectedness with the world (Kopteva, 2014).

The psychometric methodology includes 30 points divided into four scales: «Autonomy» (associated with the localization of control and reflecting a person's experience of himself as an independent, but involved in the world personality), «Vital contacts with the world» (satisfaction and harmony with life, perception of the world reliable), «Vital contacts with people» (interest in them in general, involvement in the collective, pleasure from interaction) and the «False self», the factor of ontological insecurity, which is associated with alienation from the world and the construction of a «wall» between the individual and the environment through «masks» and a false attitude to life.

2 Methods

The study involved 109 first-year students (101 girls (93%) and 8 boys (7%)) of two higher educational institutions of Rostov-on-Don (Southern Federal University (32%) and Don State Technical University (68%), the leading profile is psychological and pedagogical specialties, the average age is 17.8 years). The collection of information on the questionnaire was carried out from 29.11.2022 to 02.12.2022 by Google Forms.

We used «Method of Research of Students Adaptability in the Higher Educational Establishment» (T.D. Dubovitskaya, A.V. Krylova) (to study the overall picture of students' adaptability, this method was chosen due to its compactness and consideration of adaptation to both educational activities and the study group. The difficulties of adaptation to the cultural and educational environment of the university are analyzed and compiled by the authors into a questionnaire consisting of 16 judgments, in relation to which students note the degree of their consent [10], «Test of meaning-life orientations» (MLO) (D.A. Leontiev), «Personality life position» (PLP) (D.A. Leontiev), psychometric method «Ontological security» (OS(PM)) (N.V. Kopteva). Mathematical processing was done with the Spearman coefficient in SPSS v.26.

3 Results

First of all, it is worth referring to the correlations between the methods we used – psychometric method «Ontological security» (OS(PM)) and «Personality life position» (PLP), since previously in the authors' studies these methods were not used in a complex (Table 1).

Significant correlation was found between the general ontological security of the «Ontological security» methodology and the «Harmony with life» scale of the «Personality life position» methodology (0.712 at p = 0.00). Significant correlation was also found for the scale «Vital contacts with the world» (0.770) and «Vital contacts with people» (0.557) and the scale «Harmony with life» of the methodology «Personality life position» at p = 0.00. It is obvious that the impact on the sphere of ontological security and the experience of community with the world will be closely related to the absence of contradictions and a balanced lifestyle.
High correlation was found for «General ontological security» and «Active life position» (0.457), as well as general ontological security and autonomy (0.552) at p = 0.00. It can be assumed that an active attitude to life is closely related to the individual's awareness of responsibility for his life.

A significant negative correlation was found for the «False self» scale and the «Harmony with life» scale (-0.490), slightly less significant for the «Active life position» scale (-0.349) at p = 0.00. This confirms the lack of adaptive resource of the strategy of using «masks» in everyday life. The feeling of alienation from people and the world, resorting to false behavior, apparently, does not contribute to a harmonious attitude to life and active being.

Table 1. Correlations between the scales of the methods «Ontological security» (OS(PM)) and «Personality life position» (PLP).

<table>
<thead>
<tr>
<th></th>
<th>Harmony with life (PLP)</th>
<th>Active life position (PLP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General ontological security</td>
<td>0.712**</td>
<td>0.457**</td>
</tr>
<tr>
<td>Vital contacts with the world</td>
<td>0.770**</td>
<td>0.411**</td>
</tr>
<tr>
<td>Vital contacts with people</td>
<td>0.557**</td>
<td>0.383**</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.480**</td>
<td>0.552**</td>
</tr>
<tr>
<td>False self</td>
<td>-0.490**</td>
<td>-0.349**</td>
</tr>
</tbody>
</table>

Note. Correlations are significant at p <0.01.

The use of these methods allows us to take a comprehensive look at the problem of adaptation from the point of view of the meaning of life.

Next, we will proceed directly to the problem of adaptation. Table 2 shows the correlations between the methodic «Method of Research of Students Adaptability in the Higher Educational Establishment» and methodic «Personality life position» (PLP).

The scale «Adaptation to the study group» has a positive correlation of average strength (0.519) with the scale «Harmony with life» at p = 0.00. The scale «Adaptation to the educational activity» and «Harmony with life» have a positive correlation of average strength (0.477) at p = 0.00. It turns out that the more relevant it is for a student to perceive the student's experience as holistic, his own, authentic and adequate to ideas, the easier it is to adapt to learning activities.

Table 2. Correlations between the «Method of Research of Students Adaptability in the Higher Educational Establishment» and «Personality life position» (PLP).

<table>
<thead>
<tr>
<th></th>
<th>Adaptation to the study group</th>
<th>Adaptation to the educational activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmony with life (PLP)</td>
<td>0.519**</td>
<td>0.477**</td>
</tr>
<tr>
<td>Awareness of life (PLP)</td>
<td>0.274**</td>
<td>0.224*</td>
</tr>
<tr>
<td>Active life position (PLP)</td>
<td>0.280**</td>
<td>0.365**</td>
</tr>
</tbody>
</table>

Note. Correlations are significant at p <0.01.
Correlations between the «Method of Research of Students Adaptability in the Higher Educational Establishment» and «Test of meaning-life orientations» (MLO) are presented in Table 3.

Table 3. Correlations between the «Method of Research of Students Adaptability in the Higher Educational Establishment» and «Test of meaning-life orientations» (MLO).

<table>
<thead>
<tr>
<th></th>
<th>Adaptation to the study group</th>
<th>Adaptation to the educational activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.451**</td>
<td>.451**</td>
</tr>
<tr>
<td>General meaningfulness of life (MLO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose in life (MLO)</td>
<td>.426**</td>
<td>.529**</td>
</tr>
<tr>
<td>The process of life (MLO)</td>
<td>.553**</td>
<td>.447**</td>
</tr>
<tr>
<td>The effectiveness of life (MLO)</td>
<td>.481**</td>
<td>.481**</td>
</tr>
<tr>
<td>The locus of control – «I» (MLO)</td>
<td>.503**</td>
<td>.522**</td>
</tr>
<tr>
<td>The locus of control – «Life» (MLO)</td>
<td>.446**</td>
<td>.451**</td>
</tr>
</tbody>
</table>

Note. Correlations are significant at p <0.01.

The scales «The process of life» and «Adaptation to the study group» have a positive correlation of average strength (0.553) at the level of statistical significance p = 0.00 (Table 3). The scales «The process of life» and «Adaptation to the educational activity» also have a positive correlation of average strength (0.447) at p = 0.00. It can be said that when a student perceives the moment of studenthood as a special time, significant for later life interaction with the team and the environment, when there is a high level of understanding the importance of people around and the importance of building constructive interaction with them, the adaptation process is easier.

The scales «Goals in life» and «Adaptation to the educational activity» have a positive correlation of average strength (0.529) at p = 0.00. Thus, the presence of a specific learning goal, an understanding of the results for which students enter the university, allows them to get involved in the learning process faster.

The scales «The Locus of control – «I»» and «Adaptation to the educational activity» have a positive correlation of average strength (0.503) at p = 0.00. The scales «The Locus of control – «I»» and «Adaptation to the study group» have a positive correlation of average strength (0.522) at p = 0.00. It can be said that awareness of one's own ability to influence the course of events, taking responsibility for decisions and freedom of choice increase the chances of successful adaptation.

The scales «The locus of control – «Life»» and «Adaptation to the study group» also have a positive correlation of average strength (0.446) at p = 0.00. The scales «The locus of control – «Life»» and «Adaptation to the educational activity» have a positive correlation of average strength (0.451) at p = 0.00. It can be said that the higher the student's belief in the possibility of influencing the course of life by making decisions and implementing them, the more harmonious the adaptation to student life will be.

The scale «The effectiveness of life» has a positive correlation of average strength (0.481) at p = 0.00 with the scales «Adaptation to the study group» and «Adaptation to the educational activity». It can be assumed that the absence of active dissatisfaction with one's own past,
self-acceptance, and willingness to move and develop in a new environment will contribute to the adaptation of the student.

The scale «General meaningfulness of life» has a positive correlation of average strength (0.451) at \( p = 0.00 \) with the scales «Adaptation to the study group» and «Adaptation to the educational activity». That is, the general reflexivity, the experience of the ontological significance of one's life and connections with the world, the presence of goals and the belief in the possibility of their implementation allow one to actively manifest and adapt to new conditions.

Correlations between the «Method of Research of Students Adaptability in the Higher Educational Establishment» and psychometric method «Ontological security» (OS(PM)) are presented in table 4.

Table 4. Correlations between the «Method of Research of Students Adaptability in the Higher Educational Establishment» and psychometric method «Ontological security» (OS(PM)).

<table>
<thead>
<tr>
<th></th>
<th>Adaptation to the study group</th>
<th>Adaptation to the educational activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General ontological security (OS(PM))</td>
<td>.473**</td>
<td>.450**</td>
</tr>
<tr>
<td>Vital contacts with the world (OS(PM))</td>
<td>.524**</td>
<td>.442**</td>
</tr>
<tr>
<td>Vital contacts with people (OS(PM))</td>
<td>.416**</td>
<td>.315**</td>
</tr>
<tr>
<td>Autonomy (OS(PM))</td>
<td>.333**</td>
<td>.439**</td>
</tr>
<tr>
<td>False self (OS(PM))</td>
<td>-.354**</td>
<td>-.306**</td>
</tr>
</tbody>
</table>

Note. Correlations are significant at \( p < 0.01 \).

The scales «Adaptation to the study group» and «Vital contacts with people» have a positive correlation of average strength (0.416) at \( p = 0.00 \). So, the more relevant the student’s experience of involvement in the team and interpersonal contacts, the higher the student's adaptability.

The scales «Adaptation to the educational activity» and «Vital contacts with the world» have a positive correlation of average strength (0.442) at \( p = 0.00 \). Satisfaction with the world and perception of it as reliable, thus, contribute to a better adaptation of students.

The scales «Adaptation to the educational activity» and «Autonomy» have a positive correlation of average strength (0.439) at \( p = 0.00 \). It can be said that the best adaptation to study corresponds to the internal locus of control, taking responsibility for academic success, the experience gained, trust in yourself and your knowledge and experience.

The scale «General ontological security» has a positive correlation of average strength (0.473) at \( p = 0.00 \) with the scale «Adaptation to the study group». The scale «General ontological security» has a positive correlation of average strength (0.450) at \( p = 0.00 \) with the scale «Adaptation to the educational activity». It can be said that at least in this sample, students who have a system of supports in themselves and the world, experiencing involvement in the world (in our case, the university, their position, new circumstances) and perceive it as personally significant, while realizing themselves as an independent subject free to choose, really have a greater adaptive potential, therefore, it makes sense to address
the semantic aspects of learning and personality formation, starting from a young age, and continue to influence the semantic and ontological spheres of students within the university.

4 Discussion

Authors [1-4, 11, 12] points out that due to the unpreparedness for the university environment, some first-year students may have a state of disharmony. They may be trying to find a purpose, the meaning of their activity and studying. Transforming changes in stereotypes, habits, personal transformations may lead to a gradual search for life-meanings. Considering the subjective position of the student, including the ability to set goals, depending on the meaningfulness of their own choice, identity, motivation, activity, awareness of personal value, is important for student to entry into the social environment of the university. Also they point [12] that students who are satisfied with student life and new conditions, adapt faster to the university environment and the educational process, and, on the contrary, with dissonance, the pace of adaptation is slower and more difficult. These results can be compared with the correlation of the «Harmony» factor of the «Personality life position» methodology, which indicates a similar relationship.

5 Conclusion

Thus, this study is a contribution to the understanding of the meaningful sphere of first-year students. Special attention in the obtained results is paid to the aspects described in the scales of the MLO methodology «The process of life», «Goals in life» and «Locus of control – «I»», the methods of OS(PM) «Vital contacts with the world» and «Autonomy»; the methods of PLP «Harmony with life». This emphasizes the need to appeal to the impact on the meaningful sphere of students in the educational process. It is also important to turn to further study and practical application of aspects of students' ontological security.

And, of course, increasing the adaptive ability of students will increase the sustainability of the social sphere.

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