Research Article

The resources of adaptability in a situation of frustration: a comparative experimental study

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ABSTRACT

The article deals with mechanisms for mobilizing the resources of the individual in a situation to overcome the frustration that is studied in the framework of the methodology of the subjective approach. The analysis used data from the experiment, organized as situation of frustration for students during the examination session. Used methods: φ^* criterion (angular conversion Fischer), Q criterion Rosenbaum, goodness of fit Pearson ($\chi 2$); methods comparison, analysis and synthesis. The results showed that at students with the characteristic of subjective autonomy more stable indicators of adaptability in a situation of frustration than at others. Indicators have been defined as the inherent benefits of these students: ontological components of confidence ($p \leq 0.01$; $p \leq 0.05$); self-regulation ($p \leq 0.05$); emotional state ($p \leq 0,01$; $p \leq 0,05$). The use of strategies of coping with frustration that make them more effective: "volitional control over the senses"; "a change in its system of relations"; "rethinking and the search for solutions"; "rational approach to the study of experiences». The use of «Autonomy», as evidenced by the correlation of two important factors, where "autonomy" has a greater number of links compared to others. The discovered connection between "autonomy» and – "confidence in "Me" ($R=0,42$), "confidence in significance" ($p=0,43$), "the ability to accept failure, amend life strategies ($R=0.41$), "self-regulation" ($R=0,39$, "capacity for flexible behavior" ($p=0.39$). This indicates the stability of the expression and complex multicomponent structure of autonomy and also that from the level of expression of any of these components depend the characteristics of the manifestation of its symptoms. Where "autonomy" has a greater number of links compared to others parameter. The results can help clinical psychologists, physicians in their scientific researches and practical activities, as well as other experts on the problem of individual resources of adaptability to a situation of frustration.

Keywords: frustration, adaptability, subjective autonomy, resource.

1.INTRODUCTION

Study resources to overcome a situation of frustration we see in the development of the problem of adaptability of the rising balance in the development of the subjective approach, the allocation of which, I hope, will clarify not only the criteria of subjectivity, but the phenomenon of a special kind. Subjectivity as a property of human activity, manifesting itself through the unique properties of self-organization and self-regulation determines the specificity of external human behavior [1]. Modern researchers constantly refer to the problem of the subject.

But still the characteristics of its basic functions remain poorly understood. This basic function is the overcoming of the difficulties which cause strong emotional states, making this issue an actual one. Subjectivity is a unique property of a person is represented as a central instance of self-organization and self-regulation system in the literature [1]. Modern researchers constantly turn to the problem of subject. But still the characteristics of its basic functions remain poorly understood. This basic function is the overcoming of the difficulties which cause

strong emotional states, making this issue an actual one. In the framework of this approach we are talking about the importance of self-regulation mechanisms and of the acquired experience of independent human activity. This activity manifests itself not only in individual acts and the states of mental life, but and in a consciously controlled within behavior the practical life dynamics.

The characteristics reflecting of the subjectivity specifics - "a conscious self-regulation of a subject", "a subjective reality", "personal experience", "effective independence", etc. are specified in domestic psychology studies. A special place is occupied by "autonomy" characteristic, represented as identity, autonomy, as of a free man, who has the freedom of choice and decision concerning the actions based on moral consciousness [1]. It is known from the domestic literature that autonomy (independence) is related with the concept «the subjective regulation. [2]. According to other references we find that the property of "autonomy" of individual is a condition "ontological security", at the same time at the deficit of this property, a person becomes doomed to "ontological dependence" on the circumstances, resulting in the complete loss of independence. We believe that special attention deserves the study of the mechanisms of behavior in unexpected situations that provoke the state of frustration personality that cause problems maintaining adaptive behavior. The following questions were posed in this study. What are the subject characteristics which determine the potential of difficulty adaptive overcoming the situation provoked by a frustration factor? What is the relationship and interdependence between the indicators of adaptability (as properties) and subjective characteristics (primarily independence), and if so, can these conditions be a resource to solve problems caused by the situation of frustration?

In this article, we rely on the notion of "subjective adaptivity", with an emphasis on the specifics of this phenomenon, as a special mental organization of the individual, manifested by the form of conscious self-

regulation activities to order to overcome the unbalance caused by the situation frustration.

The main difference from the usual understanding of the properties of adaptability for us is to expand the functions of the adaptability in virtue of dynamic and meaningful aspects of conscious self-regulation to achieve the goals of behavior and human activity that allows to expand possibilities of achievement of developing effects in behavior with the vector of the upward equilibrium. [3,4].

We use the term "frustrator" deliberately instead of frustration, to designate the state, provoked by a frustrator, which corresponds to the experimental conditions. We use the term "frustrator" deliberately instead of the term "frustration" to denote the condition caused by a specially organized a high stress the situation that meets the conditions of the experiment.

2. METHODS

In the study the students were included the first and third year of the Kazan Islamic University, that will receive a diploma of " teacher of Arabic language " with the involvement as an experimenter of PhD student S. Chaplina. The experiment coincided with the beginning of the examination session, the specificity of which was connected with the organization of the conditions of unexpected obstacle on the part of teacher, which led to a tense situation for students to pass the test in connection with change of conditions of its acceptance. Prior to the experiment the students were diagnosed: held a rapid assessment of health, activity and mood (HAM) indicators; the poll: "Do you want to obtain an estimate on the subject automatically?" and "Are you confident in the automatic passing of the subject?"; the questionnaire to quantify the severity of psychological symptoms subjectivity. The obtained results were compared with an expert teacher evaluation. The result of data processing was established the experimental group of the study, which was divided into two on the criterion of the severity of the characteristics of subjectivity – of an autonomy. Students with high scores are included in the first group of (N=16) and below average

performance are included in the second group (N=24). The experiment took place as practical sessions, where students passed a test on the main subject. The scenario of the experiment was based on changing conditions. It was for student's complete surprise, a suddenness. Instead of trained home blanks on issues, were suggested tasks for independent domain model of the use of the competencies of the teachers of the Arabic language, finding bugs and possible ways to overcome them in the framework passed of the semester. In a situation when the requirements have been changed to run test purpose of the research,it's hard not to notice the ill-defined competencies. In a situation when the requirements were changed, poorly formed competences of the students cannot be overlooked in the new situation. Such control of the situation causes reorganization by students,

creating conditions for the emergence of stress, frustration. After the performed experiment students were diagnosed repeatedly: a rapid assessment of health, activity and mood (HAM); self-reports about the overcoming of difficulties (if there were any) and own performance of test passing on the basis of self-assessment; the techniques aimed at the study of "self-regulation" [6], "ontological confidence" [4] and "the adaptive attitude to difficult situations [3]. The methods of mathematical processing were used for analysis. This is the percentage calculation of results; φ^* – criterion (Fisher's angular transformation); Q – Rosenbaum's criterion that allows the comparison of two rows of numbers, not necessarily equal by amount; the correlation analysis using chi-squared test (χ^2). The methods of comparison, analysis and synthesis were applied.

RESULTS [1]

I. The results of health assessment, activity and mood analysis among students in a learning situation at frustrator impact are presented in two versions, "before" the passing of a pass-fail test, at the moment of information receipt about its change conditions and "after" the passing of a pass-fail test. In the situation "before" associated with the information about the unexpected change of a pass-fail test conditions in both groups the indicators are in the range below the standard ones, from 4.0 up to 4.5 (the standard 5-5.5 points), indicating the state of frustration signs. However, a significant difference is revealed in "after" situation according to all emotional state indicators, which is confirmed in Table 1.

Table 1 HAM indicators among the students "prior" and "after" frustrator appearance

Indicators	Average values in the groups prior to the performance of a pass-fail test		Q	Average values in the groups after the performance of a pass-fail test		Q	Differences in dynamics (prior and after the performance of a task)	Differences in dynamics (prior and after the performance of a task)
	1-st group	2-nd group		1-st group	2-nd group		1-st group	2-nd group
Health	4,1	4,0	5,8	5,2	3,9	7,8*	7,8*	2,8
Activity	4,5	4,3	5,9	5,1	4,0	7,7*	6,9	2,9
Mood	4,2	3,8	6,4	5,1	3,7	7,9*	7,1	2,8
N	16	24	N=40	16	24	N=40	n=16	n=24

Notes. 1-st group – students with high indicators, 2-nd group - students with average and low subjectivity indicators; Difference significance level: ** - $p \leq 0,01$, * - $p \leq 0,05$; evaluation according to Q-Rosenbaum criterion.

II. Observation and analysis of behaviour in a situation of frustration has allowed to Establish that the students of the first group in comparison with the students of the second group, variety of ways to

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[1] Here and then: 1-st group – the students with subjectivity indicators above average ones, 2-nd group – below average.

overcome the difficulties the choice of difficulty of overcoming depends on the process of overcoming the negative feelings associated with the purposeful suppression of emotion, behavior, control and self-control.

These include:

1) The voluntary control of feelings (70% as compared to 13%) - "I told myself, that I know the answers, you just have to remember...";

2) The change of a personal relation system (20% and 50%) - "At first, he tried very hard, then decided that there is not enough time. Thus the teacher was ready to the fact that very few people would cope it - so there was no need to try specifically";

3) Rethinking and solution obtaining (80% and 7%) - "For me, the main problem was represented by time, and one can always find a solution. I began to recall the examples of practice, tried to describe them - it helped to approach to find solutions;

4) The rational approach to the elaboration of mental actions (50% and 5%) - "I decided to start the performance with the last question, thinking that the first one will be easier to perform".

III. According to emotional response indicator in the situation "before" the group task performance the differences were observed in "agitation" state (this indicator was higher for the first group) and in "confusion" state (this indicator was higher for the 2-nd group). The modalities of states experienced by the students in the situation "after" are differentiated radically - the positive spectrum of states prevails in the first group, the negative spectrum of states prevails in the second group (See Table 2).

Table 2. Emotional response features to the changed situation of a desired result achievement among students

Category	Selection frequency prior to a task performance		φ^*	Categories	Selection frequency after a task performance		φ^*
	1-st group	2-nd group			1-st group	2-nd group	
Agitation	9 (60%)	12 (53%)	0,37	Relief	13 (81%)	8 (33%)	3,151**
Confusion	4 (20%)	11 (50%)	1,764*	Satisfaction	15 (94%)	12 (50%)	3,306**
Anxiety	7 (58%)	6 (21%)	2,889**	Happiness	10 (63%)	11 (46%)	1,041
Indignation	3 (30%)	10 (33%)	0,194	Disappointment	1 (6%)	7 (29%)	1,967*
N	16	24	N=40	Annoyance	1 (6%)	8 (33%)	2,240*
				Offense	1 (6%)	6 (25%)	1,673*
				N	16	24	N=40

Notes. Difference significance level: ** - $p \le 0,01$, * - $p \le 0,05$; evaluation according to Q-Rosenbaum criterion.

The obtained data suggest that the students of the second group have more difficulties with the solution from the situation that is likely due to the difficulty of change and situation context consideration. As a rule, this is the result of inadequate motivation to intrinsic activity increase associated with the search action to resolve the situation of frustration or activity, which does not stimulate actions.

IV.

Table 3. Self regulation peculiarities in a frustration situation among the students with different subjectivity level

Indicators	Average values in groups		Q
	1-st group	2-nd group	
Structural-component self-regulation skills	4,0	3,6	7,5*
Self-regulation features	3,7	3,5	6,6
The dynamic characteristics of self-regulation	4,1	3,2	7,6*
Personal-style features (including autonomy)	4,4	3,0	7,8*
Total development of self-regulation	45,1	40,2	7,4*
N	16	24	N=40

Note. Difference significance level: * - $p \le 0,05$; evaluation according to Q-Rosenbaum criterion.

The data presented in the table 3 resulting from the analysis show the degree of one of the most important behavior mechanism manifestation within changing life conditions. In this case - it is the overall degree of self-regulation, and the constituents of its process, the deficiency of which may lead to the state of helplessness in a frustration situation. In this case, we can see that the stage of self-regulation development in the first group is presented as a more developed one than in the second group of students. Besides, the severity of autonomy index as the most important stylistic feature of behavior in the situation of frustration is confirmed among the first group of students. V. The comparative analysis of individual psychological characteristics allowed to distinguish the differences among the students of the first and the second groups, with the advantage in the first group according to the following parameters: "The ability to change a presentation stereotype" (34.5 compared to 26.4); "The ability to accept a failure, to carry out the correction of life strategies" (41.2 and 35.7, respectively) and the "ability to flexible behavior" (57.9 and 47.3) - at the level of difference significance - $p \leq 0,05$; evaluation according to Q-Rosenbaum criterion. Besides, the significant differences were found in "ontological confidence" components as the basic property of a person. These include: "Self-confidence" (6.5 compared to 4.6 at $p \leq 0,01$); "Confidence in important" (6.2 and 4.3 at $p \leq 0,05$); "Confidence in a body" (5.9 and 4.2 at $p \leq 0,05$).

VI. The correlation analysis allowed to establish that "autonomy" indicator has the maximum amount of a positive relationship with other indicators in two groups of factors. In the first relationship with the indicators of "Self-confidence" (r = 0,42), «Confidence in important» (r = 0,43) and "Self-regulation skills" (r = 0,39). The data show what factors provide advantages for students in comparison with others. Of course, the high values of these parameters may not be the key to an effective adaptability, while they provide some potential for the preservation of psychophysical and social and mental health [10]. According to

obtained information the regulatory capabilities are the second important factor influencing the adaptability results. The first group demonstrates a positive correlation between autonomy and a high level of the following abilities development: "The ability to accept a failure, to carry out the correction of life strategies» (r = 0,41); "The capacity for flexible behavior» (r = 0,39). The second group did not show the quantification of correlation closeness between indicators. In the first group the obtained values of Pearson's correlation coefficient between 0.34 and 0.43 demonstrate a satisfactory stability of these communication values. It is obvious that the specified capacities are the one of the most important indicators concerning the adaptability level and quality.

DISCUSSION

Thus, within the framework of this experiment we managed to obtain the evidence of the unity concerning the subjective autonomy components, reflecting the particular manifestations of the emotional, mental and behavioral sides of self-control and self-regulation. The remarkable fact of the relationships between such indicators as: "autonomy" "autonomy», "ontological confidence», "self-regulation skills" ; between "autonomy" with by regulatory abilities". It is reasonable to imagine that the phenomenon of adaptability severity increase, presented by the variants of intermodal connection with the structures reflects the significant increase of conscious regulation mechanism concerning the subject activity stress in the situation of frustration and coordinating other structures. According to the literature devoted to the study of subjectivity, the distinguishing feature of this phenomenon is the fact that it includes the characteristics of regulatory experience, the accumulation of which develops the resources of subject activity, which allow to determine the inclusion measure in a problem solution, and the creativity measure during the achievement of defined objectives for yourself [6, 10]. But the facts which confirm that the degree of subject activity manifestation, reflecting the regulatory mechanisms, can change the values of other

indicators in various mental and personal structures are not presented.

Probably the regulatory mechanisms of subject activity in the situation provoked by a frustrator become increasingly strained among the students with subject characteristics, providing a rather complex conscious form of activity derived both from individual regulatory experience, as well as from the ability to reflect environmental conditions adequately.The obtained results of the experimental study allow to suggest the opportunity of adaptability traditional notions expansion. In particular, through the allocation at the level of subjectivity development within those structures that are responsible for the regulatory mechanisms of environment change characteristics reflection, and the conscious use of individual resources in the achievements of adaptability along the rising balance vector within the level of abilities. As the part of the intended prospects the further accumulation of empirical material is required.

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