

THE STUDY OF THE MASTER KIT AUTOMATED TRAINING TOOL, AS A TOOL FOR SELF-REGULATION

Timoshkina Alina Alekseevna

Clinical psychologist, candidate of psychological sciences, certified practicing and
teaching psychoanalyst

Abstract: This study presents experimental psychological data about the psychic properties and personal qualities that a person develops in the process of using the on-line program Master Kit. The study was conducted for participants who completed three stages of sampling: a questionnaire to determine the level of anxiety, clinical interviewing with a psychiatrist and training in the on-line program "Master Kit". At the third stage, the participants were divided into 2 groups: the supervised and control group, which did not participate in the training. The results of statistical data processing proved that after using the modern online program of psychological self-control, respondents of the experimental group have significantly lower indices of depression and cognitive-affective manifestations than in the respondents of the control group.

Keywords: psychological self-help, experimental psychological data, cognitive constructs, longitudinal study, depressive symptoms, cognitive-affective manifestations



Psychotherapy and Psychoanalysis Center under the supervision of
Ph.D. of Psychological Sciences A.A. Timoshkina"
8 Fruktovaya Str., apt. 2, the city of Moscow
+7 (495) 565-30-35
E-mail: info@ group-analysis.ru,
site: group-analysis.ru

Contents

Introduction.....	3
Methods and materials of the research.....	4
Sampling	4
Methods	5
Results and discussions	6
First phase of the empirical research	6
Second phase of the empirical research	8
Third phase of the empirical research	10
Conclusion	18
About the curators of the research	20
Annex 1	21
Annex 2.....	23
Annex 3.....	24

Introduction

The increasing occurrence of emotional disorders has become a socially significant phenomenon in modern society, but this problem is difficult to ignore and delegate exclusively to medical and psychological care workers. There is a high degree of stress caused by the spontaneous information flow, the growing influence of the Internet, economic instability, increasing intensity of work and life pressure associated with severe social demands for an individual to achieve high results and success.

As a result of such a situation, with its high conflict level, there is an increase in the occurrence of anxiety depressive disorders and chronic fatigue syndrome as well as the tendency toward burnout and the probability of psychosomatic diseases. Moreover, all the above-mentioned factors lead to a decrease in the ability to grasp reality and therefore an increase in the number of borderline disorders.

Such phenomena adversely affect the overall psychological climate of society and economy. According to pharmaco-economic studies in the United States, the annual damage from depression is estimated to be approximately 83 billion dollars, while in the E.U. it amounts to as much as 75 billion euros. The most significant economic losses are due to the absence of an employee at the workplace or a decrease in labor productivity due to depression despite a formal presence.

Thus, it is likely that the demand for the information products positioned by the authors as options for psychological self-help is increasing exponentially. Despite the fact that such services are very popular, there is practically no experimental psychological data on what mental properties and personal qualities are developed in the training process.

The "Super-Ego" company, which has been represented in the market of online psychological services since 2015, offers the "Master Kit" program whereby the participants learn to form a positive, life-affirming attitude to reality in the process of performing special daily tasks. The online simulator is based on the methods of emotional cognitive therapy. The automated algorithm generates and fixes a constructive life experience in four spheres: relationships, finances, health and social realization.

The objective of this research is to determine the effectiveness of online information psychological products on the example of the "Master Kit" program and find out what psychological qualities of the participants develop so as to change the emotional state at the conscious level and which cognitive structures are formed allowing to cope with a high degree of stress in connection with the present-day reality.

Based upon the target objective, we consider the following statement as a working hypothesis of the research: the modern online psychological self-help programs can create constructs in the human psyche by which to conduct psychological weighting with respect to resilience.

Methods and materials of the research

Sampling

The empirical research was conducted in Kazan.

The selection procedure was conducted in three phases. The sampling included men and women 25 to 55 years of age with secondary special or higher education.

In the first phase, all participants with expressed interest in the future experiment were sent questionnaires that facilitated the diagnosis of psychological ability as the basis for participation in the research (neurotic state, anxiety level, non-depression).

The questionnaire consisted of three checklists: the Spielberger-Khanina anxiety measurement scale as well as the Beck and Yakhin-Mendelevich depression scales allowing the diagnosis of neurotic states.

In the second phase, 44 respondents from the total sampling were selected, having scored acceptable (normative or slightly extending beyond the standard indicators of methods) values of the scales on the checklist. They were sent to the clinical psychiatric interview phase.

Moreover, the participants provided certificates from psychiatrists from their places of residence, stating that they were not subject to medical monitoring for any mental disorder. Consequently, the participants without severe mental disorders and without any case history in psychiatry were selected.

In the third phase participants were divided into two groups: experimental one which comprises 22 people and control one which comprises 22 as well.

The participants in the experimental group were offered free access to the "Master Kit" methodology for a six-month period of training. Complex testing to facilitate the measurement of psychological changes in the participants was conducted at the beginning of the research, three months and six months after the initiation of the experiment.

The control group was not involved in the training, took a set of measurements at the beginning of the research and again six months later. Diagnostics of the control group after three months (as in the experimental one) was not performed to avoid influence on the research process.

Methods

For the achievement of objectives a methodical complex was formed. It includes the following diagnostic materials:

- The Epstein intuitive-style checklist to estimate the person's orientation degree for rational or intuitive methods of choice;
- The Ellis test (self-defeating beliefs) to define psychological defense and understand its impact;
- The anticipation consistency test (V. D. Mendelevich prognostic competence test) estimates person's ability to think ahead, to predict the development of situations and own reactions to them; and
- The "Beck Depression Inventory" (BDI) checklist to identify significant symptoms of depression.

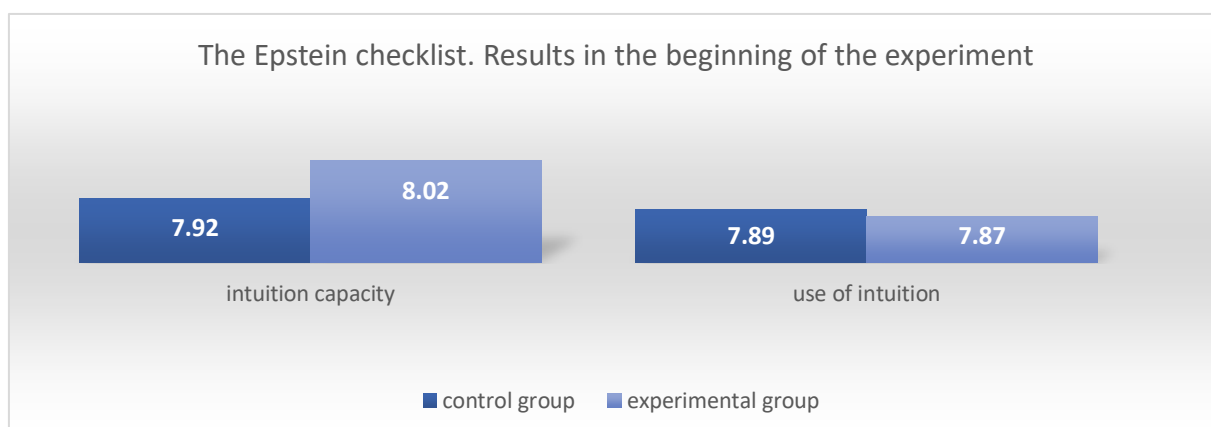
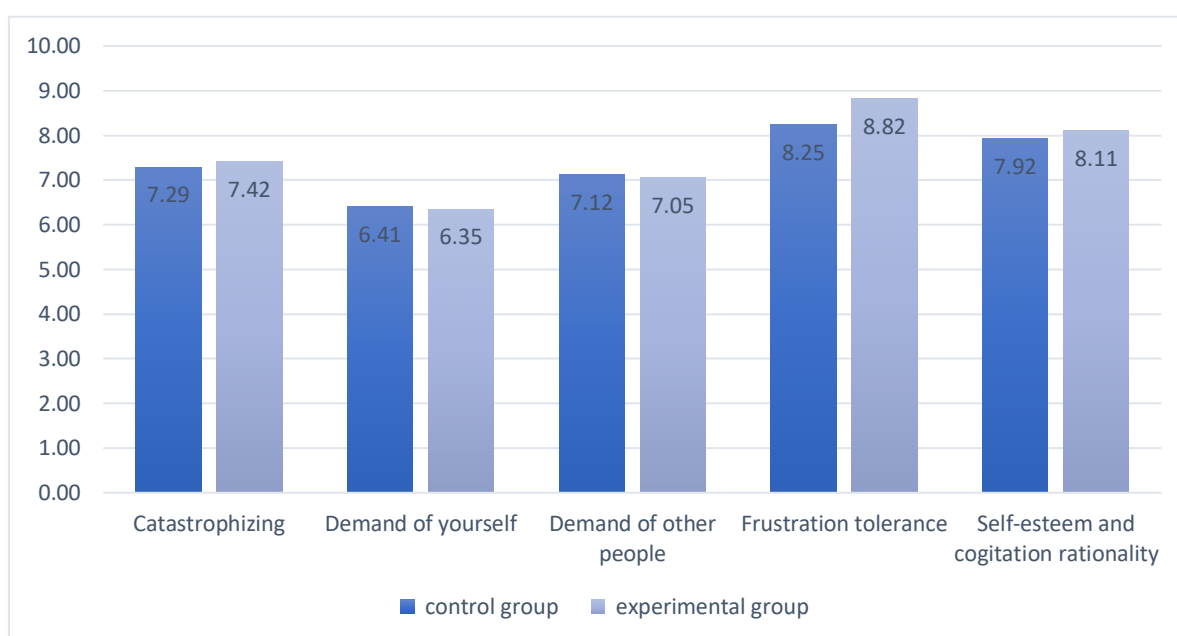
Results and discussions

First phase of the empirical research

In the first phase of the experiment the following results were obtained:

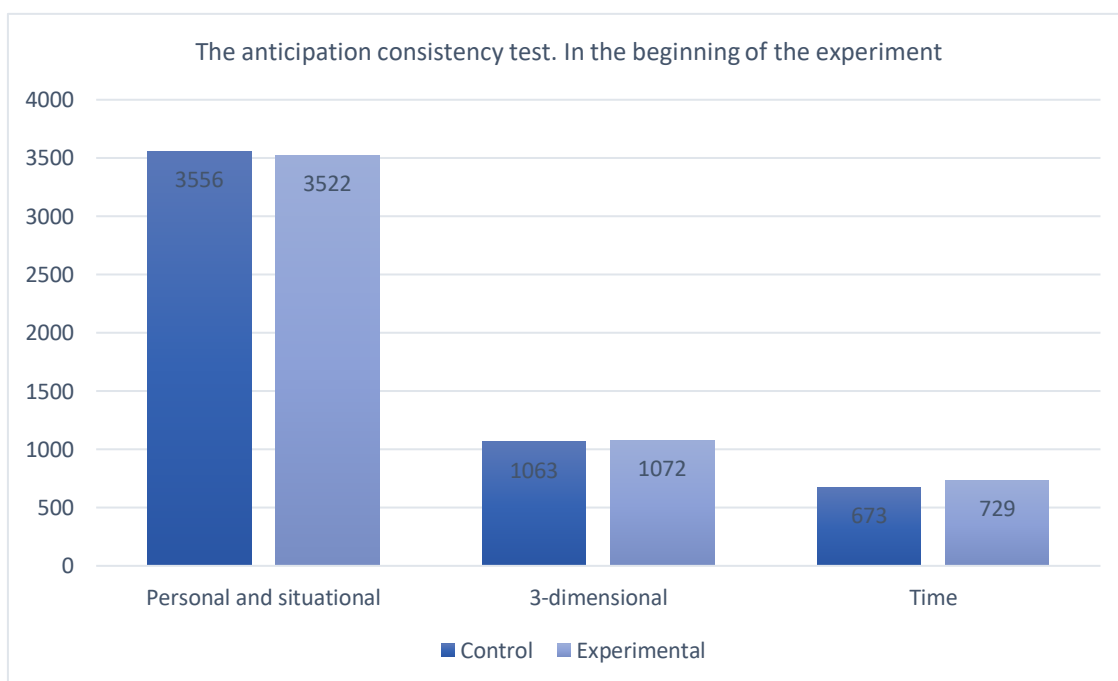
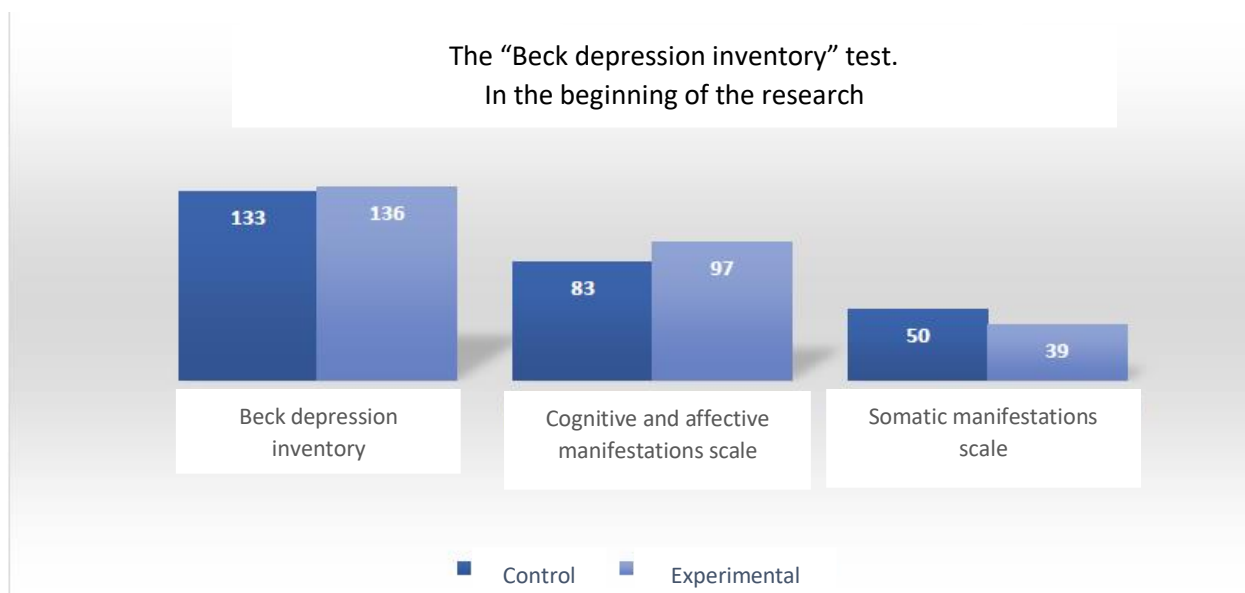
According to the Epstein checklist, as the very beginning of the research, the indices for an experimental group of "intuitive

The Ellis test. In the beginning of the experiment



scale capacity" were slightly higher. It is likely that such indices are associated with the expectation of participation in the educational process.

As can be seen, the indices of the Ellis test are similar with respect to the control group and experimental group.



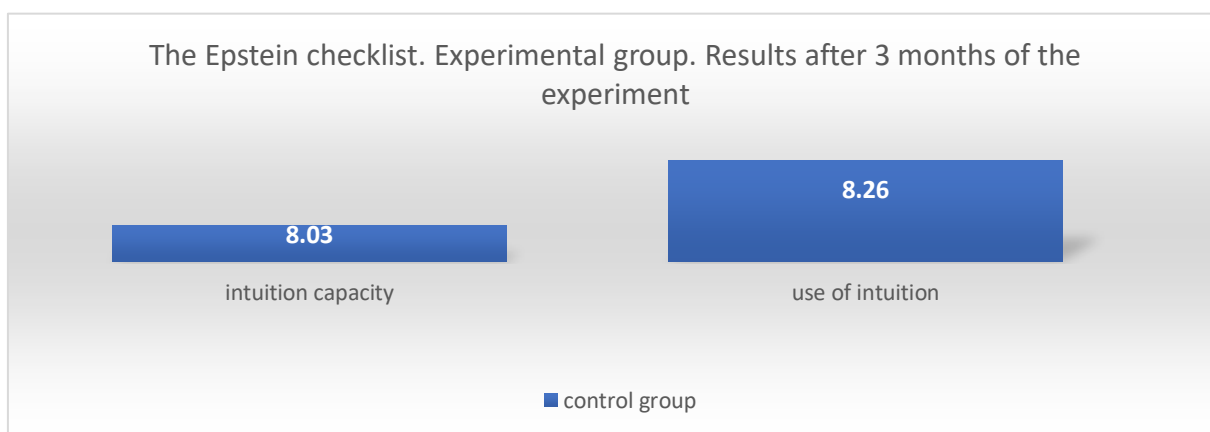
Indices at scales for the anticipation consistency test in the control and the experimental groups are nearly identical as well.

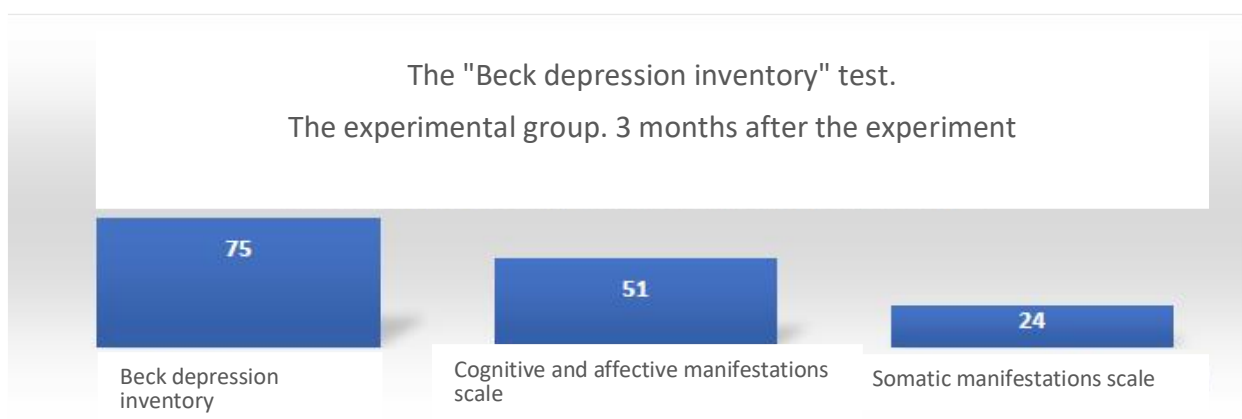
As we can see in the initial phase of the research, the experimental group has slightly higher indices of depressive symptoms at "cognitive and affective manifestations" scale. This is likely to correlate with the request for participation in

the "Master Kit" training process: to eliminate emotional discomfort from one's life.

Second phase of the empirical research

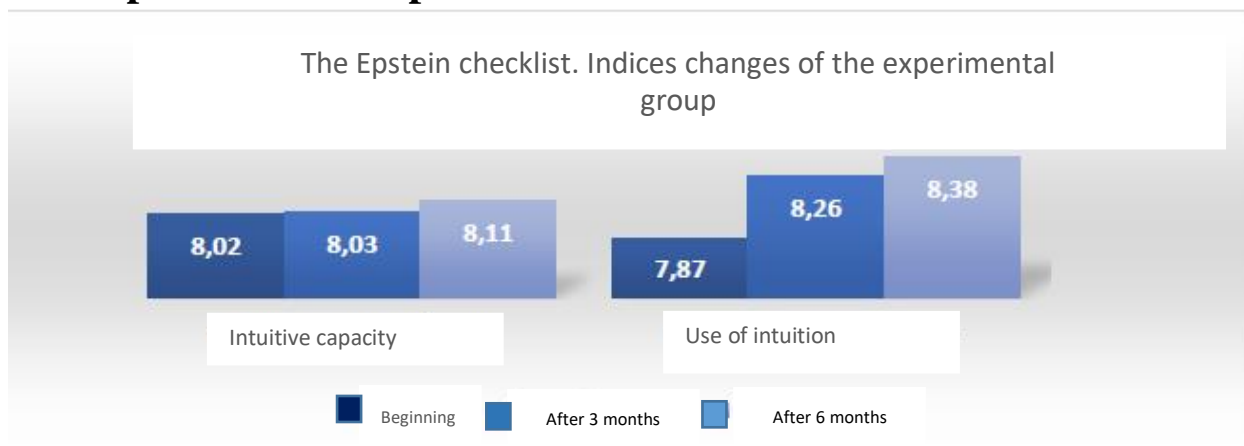
In the second phase, the methodical test complex was passed only by the experimental group.



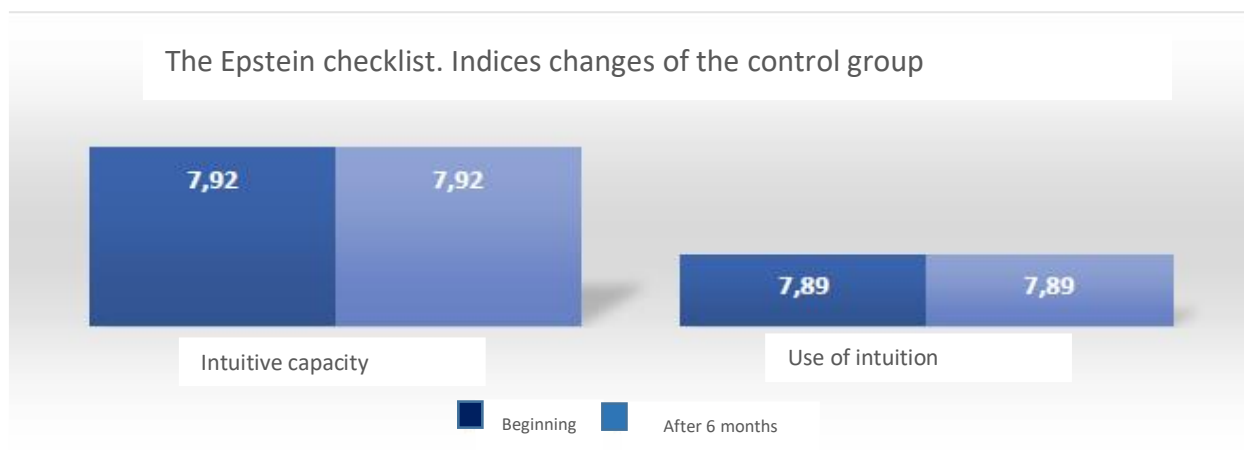


According to the results three months after the experiment, participants in the experimental group show slight changes in the Epstein test- the ability in use of intuition is increased. According to the anticipation consistency test, cognitive constructs related to the ability to predict the situation in communication are strengthened. The Beck depression inventory indices are sensibly improved. The ability in adequate emotional reactions (according to cognitive and affective scale) is increased almost in twice.

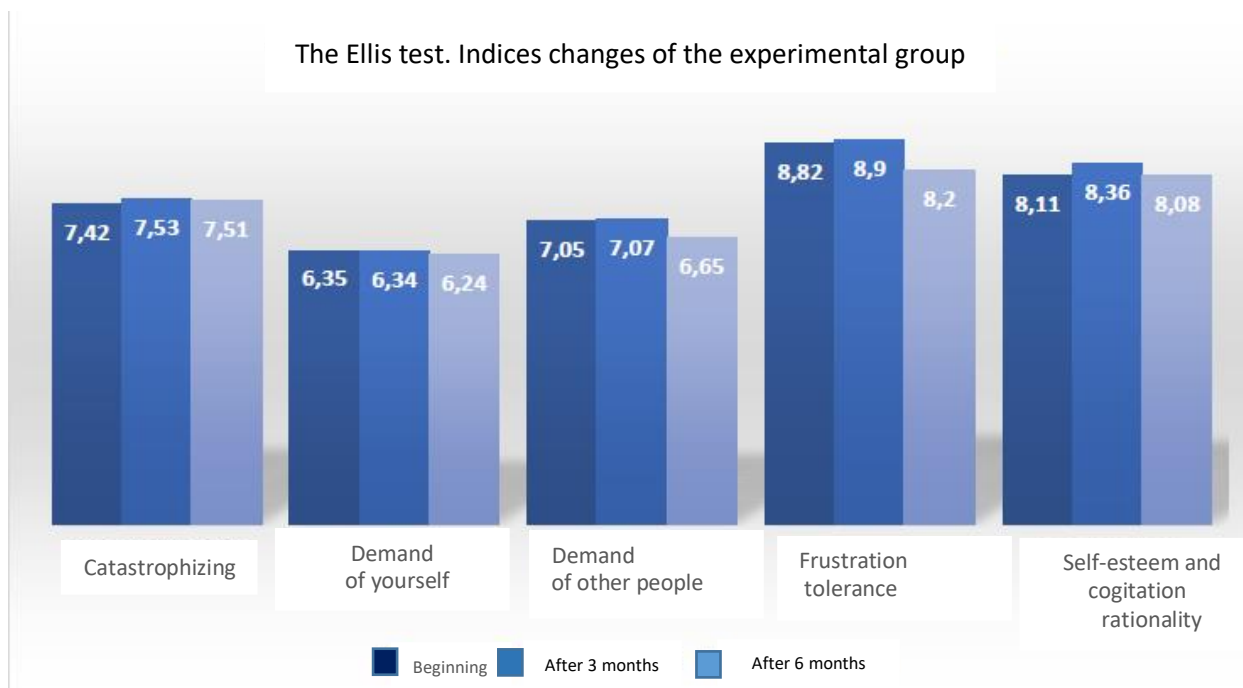
Third phase of the empirical research



As we can see, based upon the Epstein test, in the end of the experiment the participants in the experimental group show slight increase in the ability to shape the essence of events by the conclusion, based on imagination and previous experience.



The results of the control group in the beginning and in the end of the experiment remain the same.

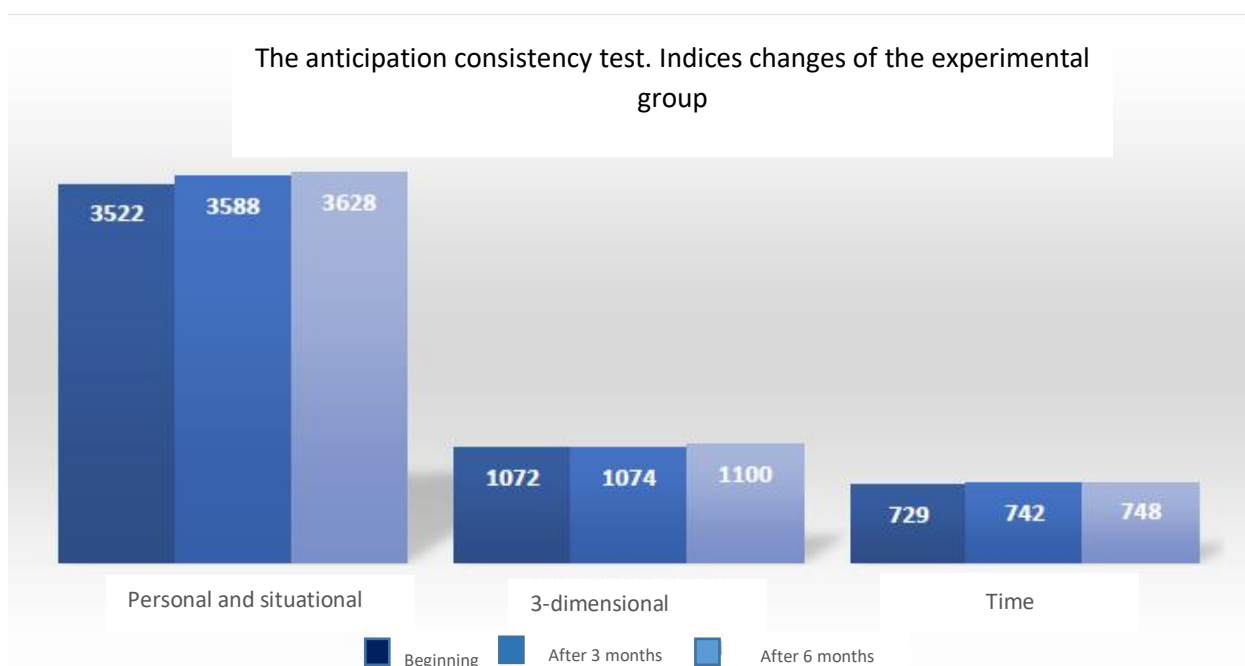
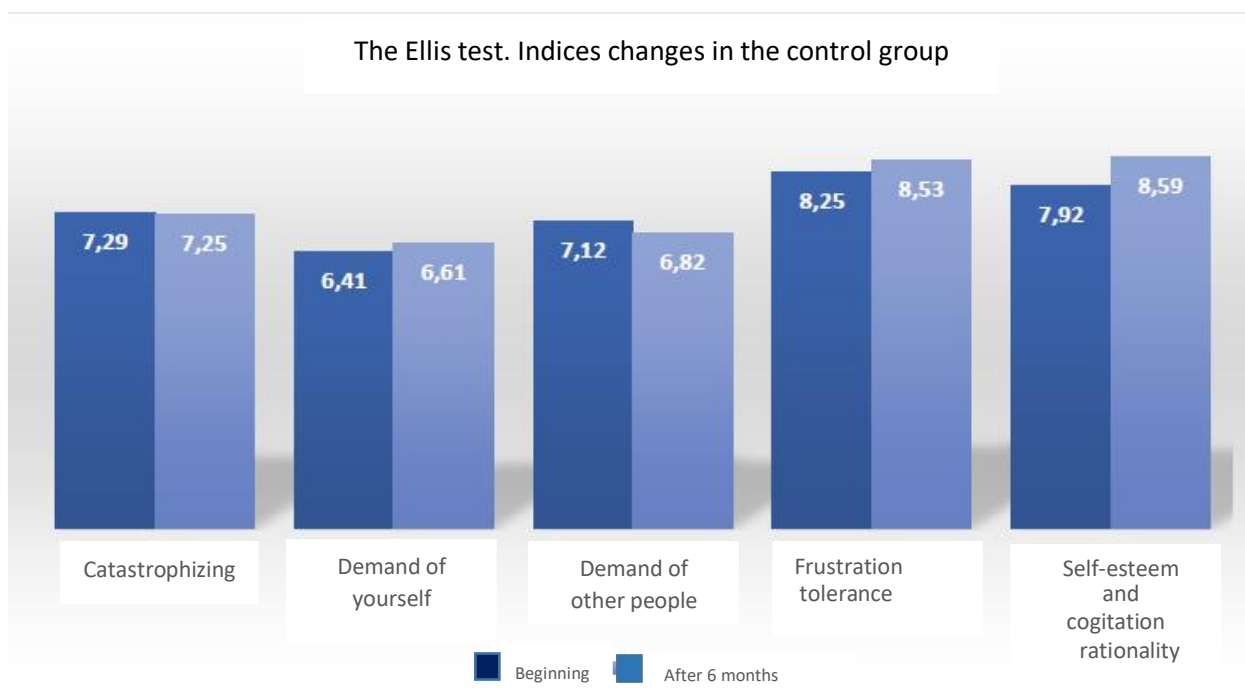


As we can see, according to the Ellis test, the participants in the experimental group showed higher indices after three months of program. The reality is adequately assessed, distress tolerance is increased and the self-assessment is improved. Qualitative indices remain high after six months, being on the "catastrophizing" scale, namely with regard to the abilities of self-control and self-diagnosis for reality assessment.

It is possible to assume that such transformation of psychological processes undergoes the same cognitive changes like a child undergoes in the third month of life. According to the Melanie Klein theory, during this period the first attempts of the approximation to reality are manifested like temporary structures which are constantly projected into the world, assessed and compared with the reality and come back in a modified form. It is notably that as a result of such structural mental changes the participants in the experimental group have increased the ability to assess the reality in the sixth month of training.

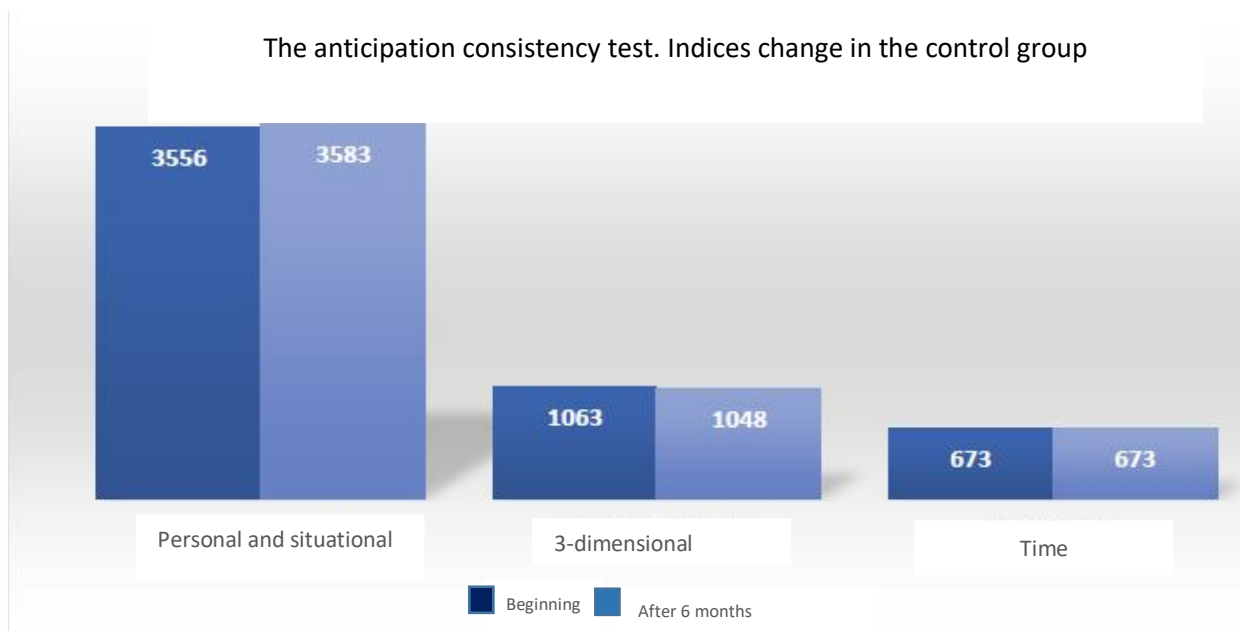
It is likely that similar mechanisms forming the beginnings of "mother-child" object relations are launched with virtual constant object that accompanies the whole training process in the "Master Kit" platform. The participants perform daily tasks through the interactive communication with the program host, possibly onto whom the motherly image is projected. This would also promote the internalization of functions to form a stable sense of self-importance. Additionally, "the object of affection" is available for regular communication in the program creating rapport and support.

In the control group, there are slight changes in the scales of "frustration tolerance" and "self-esteem and cognitive rationality." It is likely that such qualitative structural mental shifts occurred because the participants of the control group took part in the experiment as well. This would have influenced the change in mental qualities.

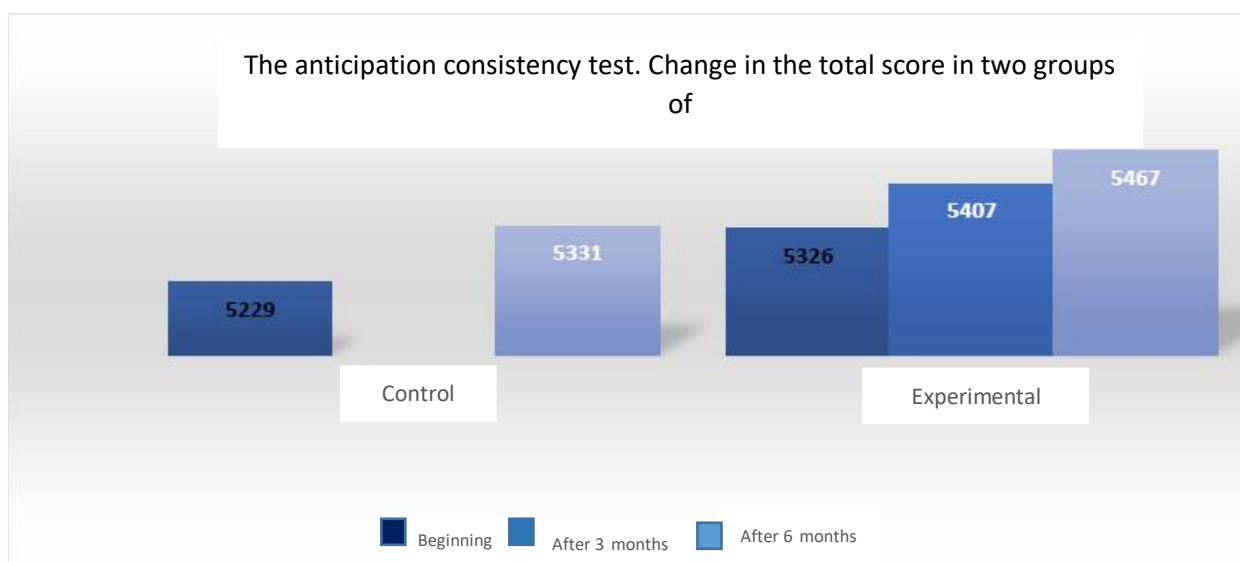


There are differences in the results of anticipation consistency test. The changes in the experimental group at all three scales occurred six months after

experiment which allows us to assume that during the training process participant's cognitive constructs allowing to use accumulated experience, to adequately assess the reality and to predict the future are increased.

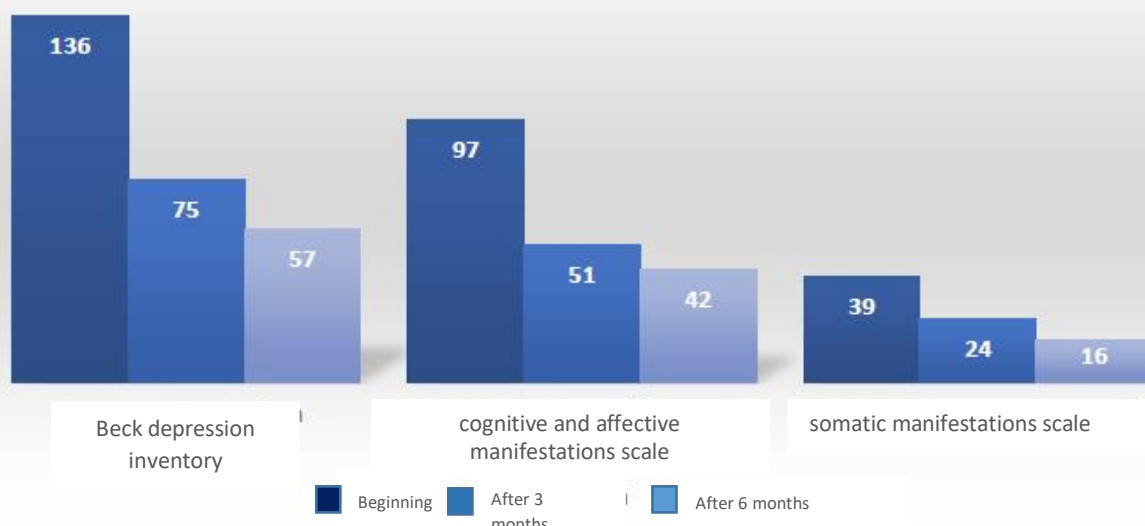


Significant changes in the control group after 6 months were not detected.



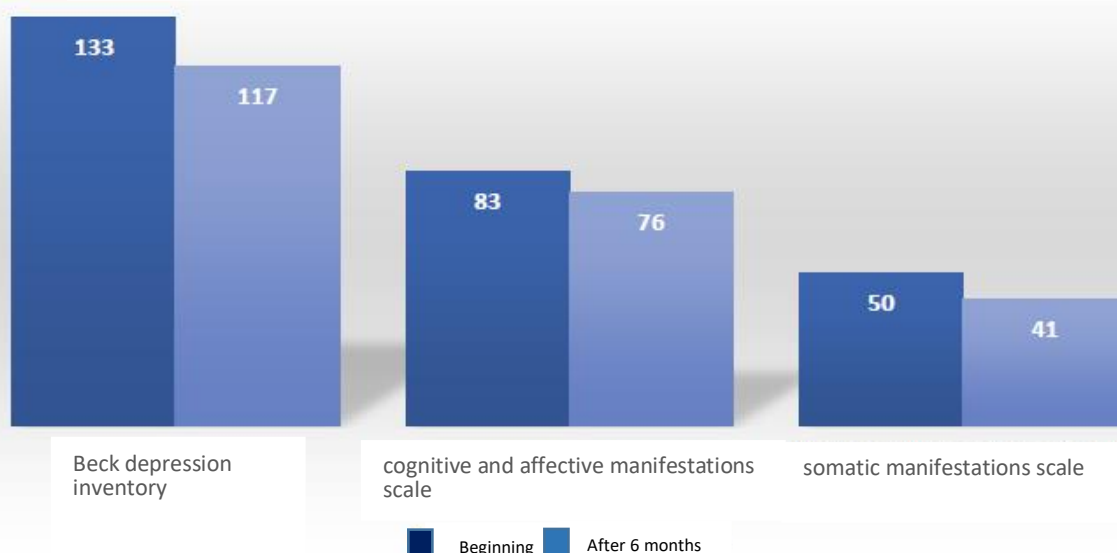
We can see significant changes in the total score (i.e., for all three test parameters) in the experimental group. Additionally, we see slight sum changes in all three test parameters in the control group as being related to the fact of the participation in the experiment.

The "Beck depression inventory" test. Indices changes of the experimental group



As we can see, in the end of the experiment the manifestations of depressive symptoms continue to decrease significantly in the experimental group (for more than 50%).

The "Beck depression inventory" test. Indices changes of the experimental group



Additionally, slight changes in the control group occur. If we compare the indices of the experimental and the control groups, we see that cognitive processes of the participants of training process are improved: perception, processing, analysis, conversion and transmission of information.

Correlation data analysis shows the representative results. To achieve the introduced hypothesis, we used the Wilcoxon criterion for dependent sampling and the Mann-Whitney criterion for independent sampling.

Initially, the study of the modern online program for psychological self-help influence on the studied variables was performed with the help of the Wilcoxon T-criterion which allows one to detect significant shifts in repeated measurements. i.e., in a situation of dependent sampling.

Measurements were conducted three times for the experimental group: before the training experiment, during the training experiment and after the training experiment. In the control group only two measurements were conducted and there was no training experiment (Annex 1).

As the result of comparisons, significant shifts in the experimental group were detected in the variables:

- The use of intuition between the initial level and the level after the training experiment ($T = 60$ for $p = 0.048$);
- Beck depression inventory between the initial level and point in the middle of the experiment ($T = 28$ for $p = 0.004$), the level after the training experiment ($T = 23.5$ for $p = 0.002$);
- Cognitive and affective manifestation scale between the initial level and point in the middle of the experiment ($T = 19.5$ for $p = 0.007$), the level after the training experiment ($T = 33$, $p = 0.013$); and
- Somatic manifestation scale between the initial level and the level after the training experiment ($T = 10.5$ for $p = 0.008$).

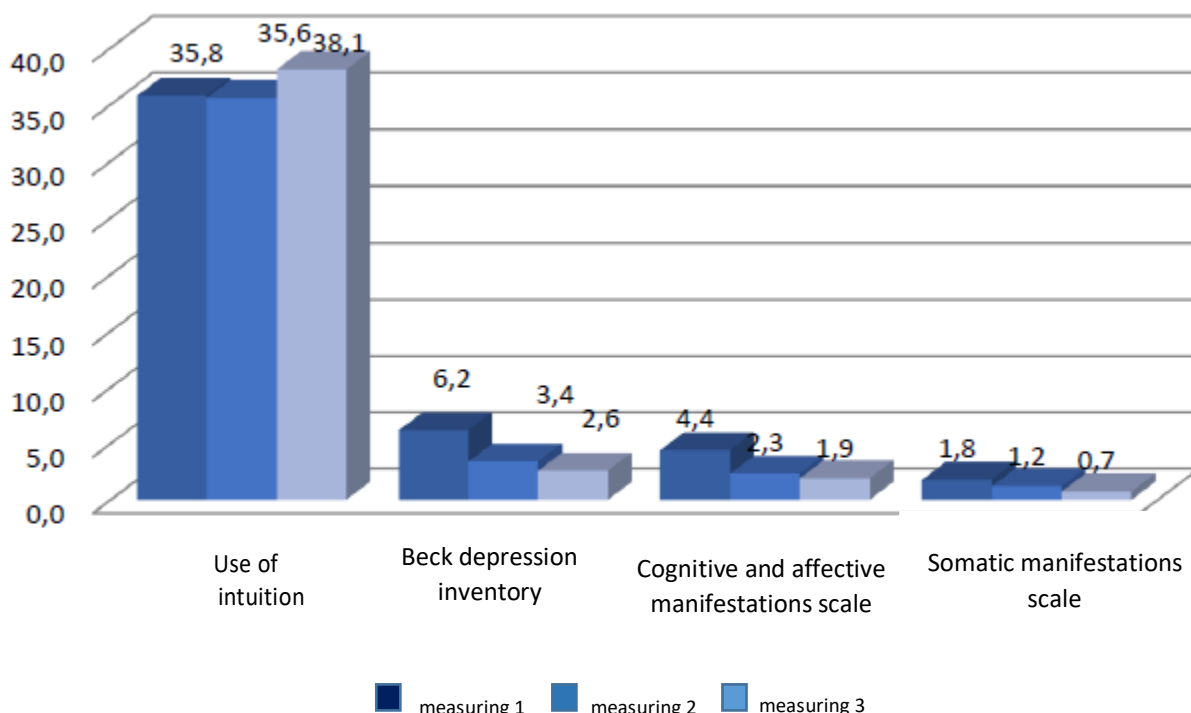


Figure 1 – Diagram of significant shifts in the experimental group

Thus, with the help of the modern online program for psychological self-help the significant increase in the level of use of intuition and also the significant decrease in the level of depression, cognitive and affective manifestations and the decrease of somatic manifestations were achieved. The obtained data testifies the positive influence of the modern online program for psychological self-help on psychological weightiness.

The control group was subject to two measurements. However, the Wilcoxon T-criterion showed no significant change (Annex 2) which indicates to the absence of temporal characteristic influence on the studied variables.

Also, to prove the effectiveness of the program the comparisons between the experimental and the control groups before and after training experiment were performed. Statistical analysis was conducted using U-Mann-Whitney test (Annex 3).

A comparison of the results shows that the significant differences between the respondents of the experimental and the control groups in terms of the level of depression ($U = 157$ for $p = 0.041$) and cognitive and affective manifestations ($U = 157.5$ for $p = 0.045$), detected after the training experiment, were identified. It is worth saying that there were no differences in any variables before training

experiment, thus it indicates to the homogeneity of sampling for the studied mental characteristics.

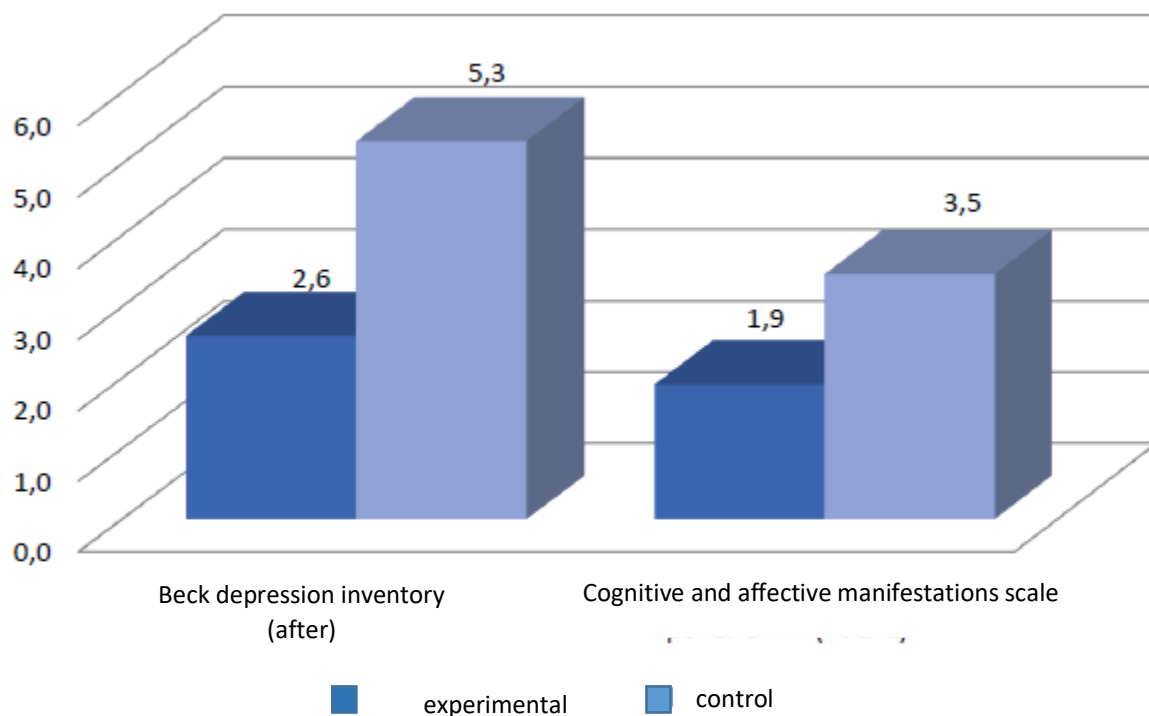


Figure 2. Diagram of significant differences in the level of depression and of cognitive and affective manifestations between the experimental and the control groups

Thus, the results of statistical data processing proved that after using modern online program for psychological self-help the respondents of the experimental group showed significantly lower indices of depression and cognitive and affective manifestations than the respondents in the control group.

Conclusion

Nowadays there is almost no experimental psychological data that researches the influence of online information products for psychological self-help from the point of important cognitive constructs formation contributing to test and to get closer to reality.

We conducted the longitudinal research that allowed to analyze which cognitive constructs are "inserted" in the participants' world view resulting from the training process with use of the «Master Kit» platform.

Comparative analysis and statistical data processing of the control and the experimental groups showed:

1. In the process of passing psychological program the participants' ability to use intuition is increased after three months.
2. Cognitive constructs related to the ability to predict the situation in communication are strengthened. It is noteworthy that in the course of training the formation of projective processes in relation to program host is observed making up the mechanism of early affection "mother-child" at the age of three months which promotes the internalization of the functions to form a stable sense of self-importance. Indeed, in the sixth month qualitative indices on the "catastrophizing" scale (i.e., the Ellis test) remain the same - abilities to assess the events as tolerable ones-that bring to a state of emotional well-being.
3. Besides, according to the anticipation consistency test, cognitive constructs are increased which allow to use the accumulated experience, to adequately assess the reality and to predict the future.
4. Throughout the whole research the decrease of depressive symptoms for the trainees of the online platform was observed (for more than 50 %).
5. The results of statistical data processing proved that after using the modern online program for psychological self-help the respondents of the experimental group showed significantly lower indices of depression and cognitive and affective manifestations than the respondents in the control group.
6. Changes in the control group occurred as well. Based upon the Ellis test, the results of the "frustration tolerance," the "self-assessment and cogitation rationality" scales as well as all three indices of the "anticipation consistency test" were improved and the degree of depressive symptoms were slightly decreased. This was confirmed by correlation analysis. It is likely that such qualitative structural



Psychotherapy and Psychoanalysis Center under the supervision of
Ph.D. of Psychological Sciences A.A. Timoshkina"
8 Fruktovalaya Str., apt. 2, the city of Moscow
+7 (495) 565-30-35
E-mail: info@ group-analysis.ru,
site: group-analysis.ru

cognitive shifts occurred because the participants of the control group take part in the experiment as well. This fact influenced the change in mental qualities.

Thus, according to the results of statistical data processing the significant increase in the level of use of intuition and also the significant decrease in the level of depression, cognitive and affective manifestations and the decrease of somatic manifestations were achieved with the help of the modern online «Master Kit» program. The obtained data testifies the positive influence of the modern online program for psychological self-help on psychological weightiness.

Diagnostics of qualitative changes in the cognitive constructs of psychological program participants along with the evaluation of changes and life characteristics which are mentioned by the participants in the end of the training process can serve as means of scientific evidence of the effectiveness of the online psychological self-help programs and to facilitate a rapprochement between psychotherapy with similar training projects.

The curators of the research:

A. A. Timoshkina <Signature>

E.M. Garaishina <Signature>

Official seal: Psychotherapy and Psychoanalysis Center International School of group analysis PhD. of Psychological Sciences Timoshkina Alina Alekseevna

About the curators of the research

Alina Alekseevna Timoshkina



**Clinical psychologist,
PhD. of Psychological Sciences,
certified practicing and teaching psychoanalyst,
business coach and business consultant, skilled
trainer of group psychoanalytic psychotherapy,
group analyst and ECPP, IAGP supervisor.
Head of Psychotherapy and Psychoanalysis
Center and International School of group
analysis
(COIRAG patronage, Italy). Work experience is
more than 20 years.**

Elvira Maratovna Garaishina



**Certified psychologist,
practitioner psychologist and psychoanalytic
psychotherapist with 3 higher educations
(pedagogics, journalism and
psychology), author of own online project.**

Annex 1

Table "The results of the comparison of variables in three points in the experimental group"

Variables		T	Z	p
Intuitive capacity (measuring 1)	Intuitive capacity (measuring 2)	124,5	0,1	0,948
	Intuitive capacity (measuring 3)	82,5	0,5	0,615
Use of intuition (measuring 1)	Use of intuition (measuring 2)	68,0	1,7	0,099
	Use of intuition (measuring 3)	60,0*	2,1	0,048
Catastrophizing (measuring 1)	catastrophizing (measuring 2)	72,0	0,6	0,557
	catastrophizing (measuring 3)	80,0	0,9	0,351
Demand of yourself (measuring 1)	demand of yourself (measuring 2)	109,5	0,2	0,835
	demand of yourself (measuring 3)	108,0	0,3	0,794
Demand of other people (measuring 1)	demand of other people (measuring 2)	92,0	0,1	0,904
	demand of other people (measuring 3)	99,5	0,2	0,837
Frustration tolerance (measuring 1)	frustration tolerance (measuring 2)	76,0	0,8	0,445
	frustration tolerance (measuring 3)	94,0	0,7	0,455
Self-assessment cogitation rationality (measuring 1)	self-assessment cogitation rationality (measuring 2)	84,0	1,1	0,274
	self-assessment cogitation rationality (measuring 3)	87,5	1,0	0,330

Personal and situational (measuring 1)	personal and situational (measuring 2)	36,0	0,2	0,814
	personal and situational (measuring 3)	105,0	0,7	0,485
3-dimensional (measuring 1)	3-dimensional (measuring 2)	44,5	0,1	0,944
	3-dimensional (measuring 3)	112,0	0,5	0,638
Time (measuring 1)	time (measuring 2)	24,5	0,8	0,450
	time (measuring 3)	95,5	0,7	0,487
Total score (measuring 1)	total score (measuring 2)	41,0	0,3	0,753
	total score (measuring 3)	90,5	1,2	0,242
Depression scale (measuring 1)	depression scale (measuring 2)	28,0**	2,9	0,004
	depression scale (measuring 3)	23,5**	3,0	0,002
Cognitive - affective manifestations scale (measuring 1)	cognitive - affective manifestations scale (measuring 2)	19,5**	2,7	0,007
	cognitive and affective manifestations scale (measuring 3)	33,0*	2,5	0,013
Somatic manifestations (measuring 1)	somatic manifestations scale (measuring 2)	27,0	1,6	0,109
	somatic manifestations scale (measuring 3)	10,5**	2,6	0,008

Note: * for $p < 0.05$; **for $p < 0.01$

Annex 2

Table "The results of the variables comparison for three points in the experimental group"

Variables	T	Z	p
intuitive capacity (before) & intuitive capacity (after)	102,5	0,1	0,926
use of intuition (before)& use of intuition (after)	115,0	0,4	0,709
catastrophizing (before) & catastrophizing (after)	96,5	0,3	0,751
demand of yourself (before) & demand of yourself (after)	92,0	0,5	0,627
demand of other people (before) & demand of other people (after)	94,0	0,4	0,681
frustration tolerance (before) & frustration tolerance (after)	118,5	0,3	0,795
self-assessment cogitation rationality (before) &self-assessment cogitation rationality (after)	61,0	1,6	0,100
personal and situational (before) & personal and situational (after)	83,5	0,8	0,422
3-dimensional (before) & 3-dimensional (after)	84,0	0,4	0,658
time (before) & time (after)	92,0	0,1	0,904
total score (before) & total score (after)	75,0	0,1	0,943
Beck depression inventory (before) & Beck depression inventory (after)	77,5	1,0	0,305
cognitive - affective manifestations scale (before) & cognitive - affective manifestations scale (after)	51,5	1,5	0,139
somatic manifestations scale (before) &	36,5	0,6	0,529

somatic manifestations scale (after)			
--------------------------------------	--	--	--

Annex 3

"Comparison of experimental and control groups results" table

Variables	Rank Sum (experimental)	Rank Sum (control)	U	Z	p
intuitive capacity (before)	510,5	479,5	226,5	0,4	0,716
using of intuition (before)	493,0	497,0	240,0	0,0	0,963
intuitive capacity (after)	507,5	482,5	229,5	0,3	0,769
use of intuition (after)	546,0	444,0	191,0	1,2	0,231
catastrophizing (before)	509,0	481,0	228,0	0,3	0,742
demand of yourself (before)	480,5	509,5	227,5	-0,3	0,734
demands of other people (before)	469,5	520,5	216,5	-0,6	0,549
frustration tolerance (before)	534,0	456,0	203,0	0,9	0,360
self-assessment cogitation rationality (before)	506,0	484,0	231,0	0,3	0,796
catastrophizing (after)	540,5	449,5	196,5	1,1	0,286
demand of yourself (after)	459,0	531,0	206,0	-0,8	0,398
demands of other people (after)	467,0	523,0	214,0	-0,7	0,511
frustration tolerance (after)	491,5	498,5	238,5	-0,1	0,935

self-assessment cogitation rationality (after)	480,5	509,5	227,5	-0,3	0,734
personal and situational (before)	510,0	480,0	227, 0	0,4	0,725
3-dimensional (before)	500,5	489,5	236,5	0,1	0,897
time (before)	535,5	454,5	201,5	1,0	0,342
total score (before)	514,5	475,5	222,5	0,5	0,647
personal and and situational (after)	504,0	486,0	233,0	0,2	0,833
3-dimensional (after)	537,0	453,0	200,0	1,0	0,324
temporary (after)	549,0	441,0	188,0	1,3	0,205
total score (after)	554,5	435,5	182,5	1,4	0,163
Beck depression inventory (before)	494,5	495,5	241,5	0,0	0,991
cognitive and affective manifestations scale (before)	515,0	475,0	222,0	0,5	0,639
somatic manifestations scale (before)	466,0	524,0	213,0	-0,7	0,496
depression scale (after)	412,0	578,0	157,0*	-2.1	0,041
cognitive and affective manifestations scale (after)	416,5	573,5	157,5*	-2.1	0,045
somatic manifestations	441,5	548,5	188,5	-1.3	0,209



Psychotherapy and Psychoanalysis Center under the supervision of
Ph.D. of Psychological Sciences A.A. Timoshkina"
8 FruktoVaya Str., apt. 2, the city of Moscow
+7 (495) 565-30-35
E-mail: info@ group-analysis.ru,
site: group-analysis.ru

scale (after)					
---------------	--	--	--	--	--

Note: * for $p < 0.05$; **for $p < 0.01$