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**PSYCHOCORRECTION OF SELF-ESTEEM OF MIDDLE-AGED
WOMEN THROUGH FITNESS**

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Abstract

The self-esteem of middle-aged women has its own peculiar features in comparison with one of men: it is more dynamic, less stable, and more dependent on external evaluation. One of the means of psychocorrection that can deal with these problems is physical activity. The studied issue has its own theoretical and methodological framework (the cultural-historical theory, the personality development theory, theories of developmental and gender psychology, a systematic approach to personality, and approaches to the definition and structure of self-esteem and physical self-esteem). We used theoretical methods (a comparative analysis of professional literature, collection and interpretation of theoretical and factual information, simulation; an ascertaining and an educational empirical experiments), applied the self-esteem evaluation technique by Budassi ("Ideal-self and Real-self"), the self-assessment technique by Boiko, the technique of studying self-approach to the physical self adapted by Cherkashina (self-evaluation of own anatomic and functional characteristics), realized quantitative and qualitative data analyses, and performed the Wilcoxon T test. The study showed that as a result of the implemented psychocorrection programme the majority of the subjects experienced the change in self-image and perception of personal qualities. Working in groups helped the subjects to increase the self-knowledge and learn what impression they leave on others, therefore developing their social self.

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1. Introduction

Social, economic and political changes in the modern world have an ambiguous effect on a person. First and foremost, an unstable economic situation creates a sense of the lack of psychological safety for the majority of the population (Dolgova, Kryzhanovskaya, Popova, Tul'kibaeva, & Shayakhmetova, 2016; Dolgova, Mamylyna, Belousova, Melnik, & Arkayeva, 2016; Shemanova, 2008). It affects the behaviour of a person and their emotional resilience (Henderson & Lopez-Castillo, 2016; Kadykova, Fridel, & Shorohova, 2016; Romanowska-Tolloczko, & Smolinski, 2007) as well as their world view. An established way of life including a permanent job and a certain income level can rapidly deteriorate to such a degree that a person facing unexpected problems finds themselves in a self-esteem crisis (Anderson, Hildreth, & Howland, 2015; Burn, 2014; Fisher, Fisher, & Shuper, 2014). Therefore, the most productive study here would be the one on self-esteem. In psychology different aspects of the phenomenon have already been studied: the role of social factors in the formation of self-esteem (Horney, 2009), the place of self-esteem in the general structure of personality, the definition of self-esteem with the division into structural components (Asmolov, Schekhter, Chernorizov, & Lvova, 2018) self-esteem in the process of ontogenetic development, the identification of constituent elements of the self-esteem development, and the formation of the development and transformation mechanisms of self-esteem (Kotlo, Kotlo, & Yachmeneva, 2016). In psychology the first researchers to study self-esteem were William James, Charles Cooley and George Mead (q.v. Mead, 2009). William James described the complexity of self-esteem and divided a person's mental picture of self into I, the side that is capable of self-reflection, and Me, the side that combines a material, a social, a physical, and a spiritual self. Charles Cooley and George Mead highlighted interpersonal social interaction as a source of self-esteem development and explained that self-esteem is formed only due to interaction with another individual.

Self-esteem is built on the way an individual perceives oneself. An individual assesses a situation based on their own unique needs, beliefs and values which influence their behaviour (Burns, 2008). With age the motives of a self-developing individual evolve (Cerasoli, Nicklin, & Ford, 2014; Gabriel, Valenti, & Young, 2016; Maslova & Solodkov, 2007). The motives are such elements that reflect a personality and that impact the changes in self-esteem of an individual. Self-esteem is a combination of all the beliefs of an individual of oneself, or of self-image, and a subjective assessment of the image. Those feelings and emotions that the self-image induces and acceptance or rejection of them can be referred to as self-esteem. Self-esteem is a broader concept. It is not only the accumulation of images, thoughts, feelings and emotions of an individual of oneself, but also a lens through which an individual views the world and through which their personal assessment of a situation is formed. It is a unique perception of oneself in time and space that is developed due to interactions with other people, that changes throughout life, and that influences the perception of the past and the present and creates the foundation for the possible future, as self-esteem has a direct impact on the behaviour of an individual and regulates their motivation (Gordeyeva, 2016; Leontyev, Lebedeva, & Kostenko, 2017).

In the study we used three components and three types of self-esteem:

1. Self-image is a general perception of oneself including one's abilities, talents, social status, interpersonal relationships, energy resources, and other personal traits.
2. Self-esteem is one's assessment of self-image. It can vary in intensity depending on how well an individual handles the differences between the real self and the desired self.

3. Self-schemas are patterns of behaviour and behavioural reactions that are directly connected to self-image and self-esteem. An individual's actions and the direction an individual is attracted to and headed in are directly linked with their stable perception of themselves.

Three components of self-esteem:

1. The real-self (the view inwards) combines the aspects regarding the real perception of oneself.
2. The looking-glass self (the external view) consists of aspects regarding an individual's beliefs of how they are perceived by others. The looking-glass self can differ from the actual perception of an individual by others. It is merely a subjective outside perspective on oneself.
3. The ideal-self includes aspects regarding the desired self of an individual. They can be degrading, imposed from the outside, cruel, rigid and unobtainable, or they can inspire a person to grow and move towards new goals and achievements.

The real-self and the looking-glass self should be, in effect, harmonized. The ideal-self is a combination of an individual's expectations and aspirations. They can be delusional, unobtainable and far from the reality. The aspects that form the ideal-self can be influenced by the environment, upbringing, cultural background, national traditions and customs, social norms, religious world view and mass media. They are assimilated by an individual and with the help of social reinforcement become personal ideals. In an effort to comply with the ideal-self an individual can react to external circumstances by changing self-esteem. Depending on the "who I am" and "what I am" beliefs the expression of emotions can be restrained or exaggerated. Self-esteem can be rigid, static and relatively unaffected by different circumstances, or vague, ill-defined, with unclear perception of oneself.

The perspectives on the issue of the formation of self-esteem based on the gender-role identity differ significantly in theories of various approaches and with time undergo some changes. Supporters of the biological and evolutionary theory (Freud, 2007) link social and psychological differences between men and women to the inborn gender-specific characteristics (such as hormones and brain function). But many scientists say that the social component has the same, or in many cases, a bigger role in the formation of the personality in a man or a woman (Bolach & Pystupa, 2014).

Regardless of the social status, at a certain age a person starts to feel irreversible age-related changes. Supporters of Freud's theory of psychoanalysis believe that it is caused not by changes in health but by changes in libido. The self-esteem of a woman is more dynamic and less stable, as often a woman cannot simultaneously handle all of her roles equally well and thus feels guilty. In women the self-esteem is strongly connected with the opinion of others, therefore they are more vulnerable to adverse assessments by others (Shishkina & Beygul, 2014; Sologubova, 2011). Even if a woman understands that she did her work well, she still needs her actions to be recognised by the people who are important to her. Even if a woman considers herself attractive, she still needs to hear it as a compliment. Men are more independent in this regard. To be in harmony with herself, a woman needs to be in harmony not only with her self-image, but also with her looking-glass self, or the way she believes she is perceived by others.

For women every decade of age brings new worries. Turning forty often results in a midlife crisis. Women summarize their experience, contemplate the decisions made, ponder what should be done to reach a set objective, and look for the meaning of life (Solodkov & Sologub, 2003). Fear of death is not the biggest worry. Seeing the lessening of opportunities a woman may be faced with the fear of not being able

to fulfil herself in the second half of her life. After a woman turns forty five, her body undergoes changes, as menopause begins and chances of motherhood disappear. It also can cause stress. But there are positive tendencies as well. In modern society more and more women over fifty feel more active and energetic as they finally learn to enjoy their lives.

One of the means of psychocorrection of self-esteem of middle-aged women is physical activity (Kon, 2006; Petrovych, 2013). As a woman gets closer to her ideal body shape, her self-esteem changes as well. The main benefit lies not only in the external changes, but also in the internal transformation. Strength training helps to increase stamina and self-confidence. Dance movement classes give an opportunity to saturate life with new emotions. Besides from being great stress management, it provides with a chance to see oneself in a new light and do something new, to feel attractive and evoke femininity and sexuality. Deep breathing and exclamations during physical activity have a positive effect on women, as they help to get rid of psychological inhibitions and suppressed negative emotions. After such intensive and emotionally saturated trainings women feel relief and emotional lift, a bond with other participants and a feeling of involvement and joy. Training allows for emotional reboot (Zagvyazinskiy, 2008). Extensive psychosomatic inhibitions have an adverse effect on a person. To improve general well-being yoga, pilates and stretching are recommended. Such physical activities help to gradually establish a better understanding of own body, figure out the right approach to oneself and accept oneself unconditionally. Suppressed emotions hidden in subconsciousness and psychological defence used in an attempt to protect oneself eventually affect not only mental health, but also physical well-being. And to treat psychological problems one must start with the latter

2. Problem Statement

We presented steps of the study that needed to be taken in order for the main objective of the study to be achieved in the Tree of Goals (see Figure 01).

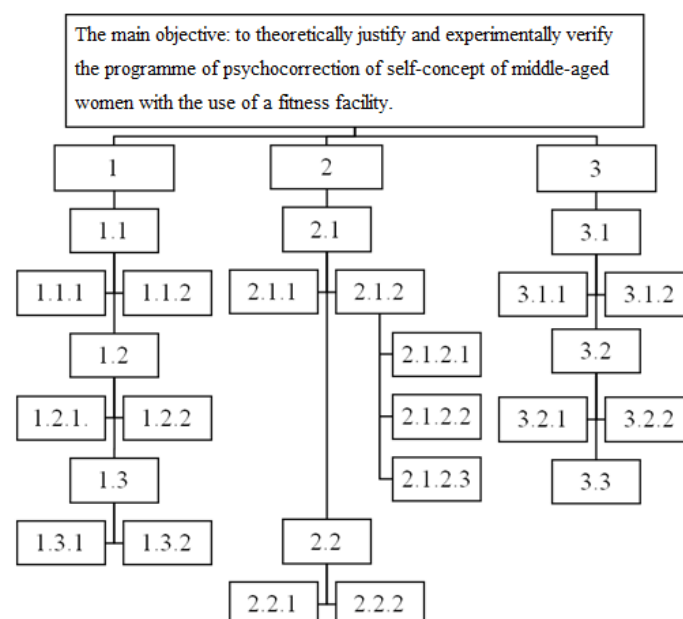


Figure 01. the Tree of Goals presenting the goals of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility

The main objective: to theoretically justify and experimentally verify the programme of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility.

The realization of the main objective demands three types of activities:

1. to analyse a theoretical background of the study of self-esteem of women.
 - 1.1. to analyse the self-esteem phenomenon in theoretical studies:
 - 1.1.1. to compare different definitions of self-esteem;
 - 1.1.2. to study the classification and structure of self-esteem.
 - 1.2. to identify psychological aspects of self-esteem of middle-aged women:
 - 1.2.1. to study psychological aspects of middle-aged women;
 - 1.2.2. to identify characteristic aspects of self-esteem of middle-aged women.
 - 1.3. to develop a model of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility.
 - 1.3.1. to create a model of the goals of psychocorrection;
 - 1.3.2. to define the content of each step of the psychocorrection model.
2. The second type of activity: to organize a field experimental study concerning self-esteem of middle-aged women:
 - 2.1. to determine stages, methods and techniques of the study:
 - 2.1.1. to define stages of the study;
 - 2.1.2. to determine methods and techniques of the study:
 - 2.1.2.1. to describe the Ideal-self and Real-self technique by S.A. Budassi;
 - 2.1.2.2. to describe the technique of studying self-approach to the physical self adapted by A.G. Cherkashina;
 - 2.1.2.3. to describe the self-assessment technique by V.V. Boiko.
 - 2.2. to define the sample group and analyse results of the ascertaining experiment:
 - 2.2.1. to define the sample group;
 - 2.2.2. to analyse results of the ascertaining experiment.
3. The third type of activity: to carry out a field experimental study of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility:
 - 3.1. to create and implement a programme of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility:
 - 3.1.1. to define goals and objectives of the psychocorrection programme;
 - 3.1.2. to develop building blocks of the psychocorrection programme.
 - 3.2. to analyse findings of the programme of psychocorrection of self-esteem of middle-aged women:
 - 3.2.1. to analyse results of the psychocorrection programme on the basis of the selected techniques;
to conduct a mathematical and statistical analysis of results of the study with the use of the Wilcoxon T test.
 - 3.3. to give recommendations to the participants of the programme of psychocorrection of self-esteem of middle-aged women.

3. Research Questions

Research questions concerned classification and compilation of the existing concepts and solutions of the issue of self-esteem of middle-aged women; development of a structural and functional model of psychocorrection of self-esteem of the subjects with the use of a fitness facility; development and implementation of the programme of psychocorrection of self-esteem with the use of a fitness facility.

4. Purpose of the Study

The purpose of the study was to theoretically justify and experimentally verify the programme of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility.

5. Research Methods

The theoretical and methodological framework of the study consisted of Vygotsky's cultural-historical theory that described general patterns of the social development of a person including the works of his followers; theories of personality development; theories of gender psychology; a systematic approach to a personality as a combination of interrelated characteristics; theories of gender-related characteristic aspects; theoretical approaches to the definition and structure of self-esteem; and studies of the physical self.

We applied such theoretical methods as a comparative analysis of professional literature on the issue, a method of collecting and interpreting theoretical and factual information, and simulation.

We conducted an ascertaining and an educational empirical experiments with the use of three techniques (Zabrodin & Pakhalyan, 2015): the self-esteem evaluation technique ("Ideal-self and Real-self") by S.A. Budassi, the self-assessment technique by Boiko, the technique of studying self-approach to the physical self adapted by Cherkashina (self-evaluation of own anatomic and functional characteristics).

We realized quantitative and qualitative data analyses by performing the Wilcoxon T test (Sidorenko, 2003).

The study involved 30 middle-aged women (from 35 to 50 years old).

In the study a model of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility was developed that included four sections: theoretical, diagnostic, correctional and developmental, and analytical.

The study consisted of three stages: a desktop analysis, an experimental research, and a data analysis.

We developed and implemented a programme of psychocorrection of self-esteem of middle-aged women with the use of a fitness facility.

The objectives of the programme were

1. to create opportunities for the subjects to acknowledge their qualities and abilities (who I am),
2. to define their looking-glass selves (how others perceive me),
3. to identify their ideal-selves (my desired self), to make them realize the presence of destructive aspects and psychological defence mechanisms and understand their own life goals and values,

4. to determine the aggregate picture of their personal stable self-esteem (what I am, what I want, how I act), to make them understand the characteristic aspects of their way of thinking, perception of reality and patterns of interactions with others, to make them perceive themselves as a unique and complete personality,
5. to build in them a foundation for the formation of a balanced progression of the psychological and emotional self-esteem and conscious behaviour through the comprehension of their personal qualities and abilities,
6. to create conditions for the formation in them an active position in life and an orientation towards the internal locus of control,
7. to determine a personal significance of the occurred changes.

The study was conducted in the Coliseum fitness facility in Chelyabinsk and comprised 30 women. The age of the subjects: 10 women from 35 to 39 years old, 9 women from 40 to 44, and 11 women from 45 to 50. The marital status of the subjects: 18 women (60%) are married, 12 women are currently single (40%), 2 women have never been married (7%). The education of the subjects: most of the subjects (60%) have a university degree, 17% did not complete a university course, 23% have a vocational training degree. The absolute majority (77%) have a job. Most of the subjects agreed to participate in the study due to the desire to change the personal appearance. A part of the group wanted to lose weight, another part with no excess weight wanted to improve the appearance in general. All of the subjects expressed their wish to improve their well-being and the performance of their body as well as to introduce some changes in their daily routine and develop healthy habits.

6. Findings

The findings of the ascertaining experiment based on the Ideal-self and Real-self technique by S.A. Budassi showed an unreasonably high self-esteem in 3% of the subjects. A reasonably high self-esteem was found in 10% of the subjects. The majority of the subjects (47%) displayed an average self-esteem. 30% of the subjects showed a reasonably low self-esteem and 10% had an unreasonably low self-esteem.

The anatomic and functional characteristics were subjectively evaluated by the majority as average (67% and 77% respectively), but the difference in the given evaluations was significant. 13% of the subjects evaluated their anatomic and functional characteristics as low, while 20% evaluated their anatomic characteristics as high and 10% gave the same evaluation to their functional characteristics. The subjective evaluation of the body characteristics was clearly important for us during an ascertaining experiment phase.

During an educational experiment phase we aimed at studying the impact of the subjective evaluation of the characteristics on the increase of the internal locus of control (Rose, Horne, Rose, & Hastings, 2004; Shahlina, 2001; Shakira, 2016) of the subjects. We anticipated that there would be correlation between the improvement of the characteristics and the change in self-esteem of the subjects.

The findings of the self-assessment technique by Boiko showed that the most common type of rigidity, the hyperthymic one, was displayed in 37% of the subjects, while other types of rigidity were split among the rest ranging from 3% to 10% (dysphoric was found in 3% of the subjects, euphoric in 7%, dysthymic in 7%, and exalted in 10%).

The analysis illustrated that some subjects (14 women) had a harmonious self-esteem including average self-esteem (a balance between the real-self and the ideal-self), normal or acceptable emotional rigidity, and average or high self-evaluation of the physical self. 16 women who had a disharmonious self-esteem including a significant divergence between the ideal-self and the real-self, an unreasonable self-assessment, and low self-evaluation of the physical self were recommended physical activity based on the programme of psychocorrection of self-esteem.

The implementation of the psychocorrection programme resulted in remarkable changes in self-esteem, for instance, changes occurred in the self-evaluation of the anatomic characteristics of the physical self and in the personal importance of the physical self characteristics (Figures 2 and 3).

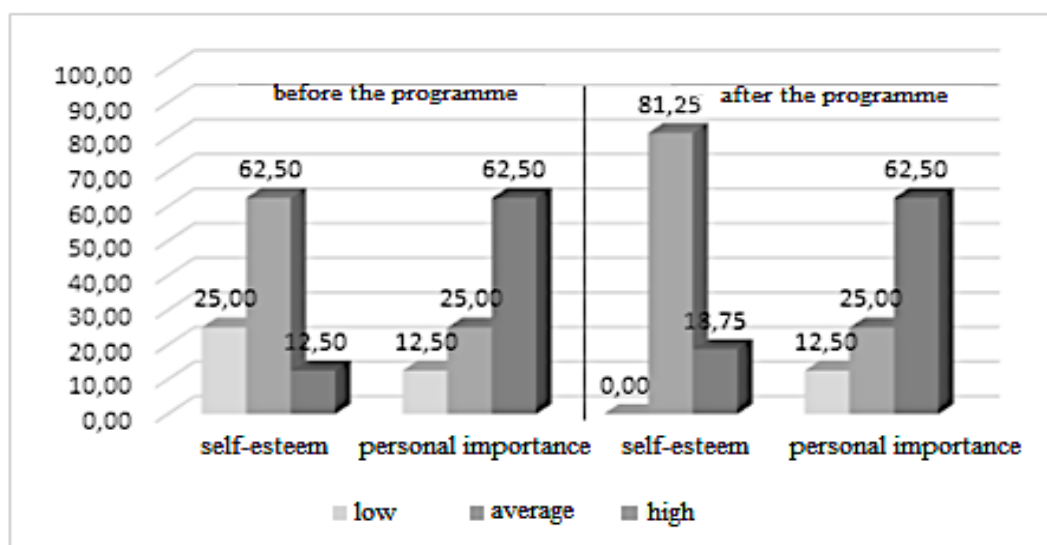


Figure 02. Findings of the self-evaluation of the anatomic characteristics of the physical self and the personal importance of the physical self characteristics before and after the implementation of the programme based on the technique of studying self-approach to the physical self by Cherkashina

The findings of the analysis based on Cherkashina's technique demonstrated a significant increase in the level of satisfaction with the anatomic and functional characteristics of own body in the subjects. The percentage of low self-evaluation of the external body characteristics dropped from 25% to 12.5%. The percentage of average self-evaluation dropped from 62.5% to 25% due to the increase in self-esteem. The percentage of high self-evaluation of the anatomic characteristics rose from 12.5% to 62.5%. Overall the subjects gave a positive response to weight loss, a more petite figure and a better personal appearance in general. The biggest changes were documented in the weight and stomach aspects. The subjective importance of the anatomic characteristics remained unchanged.

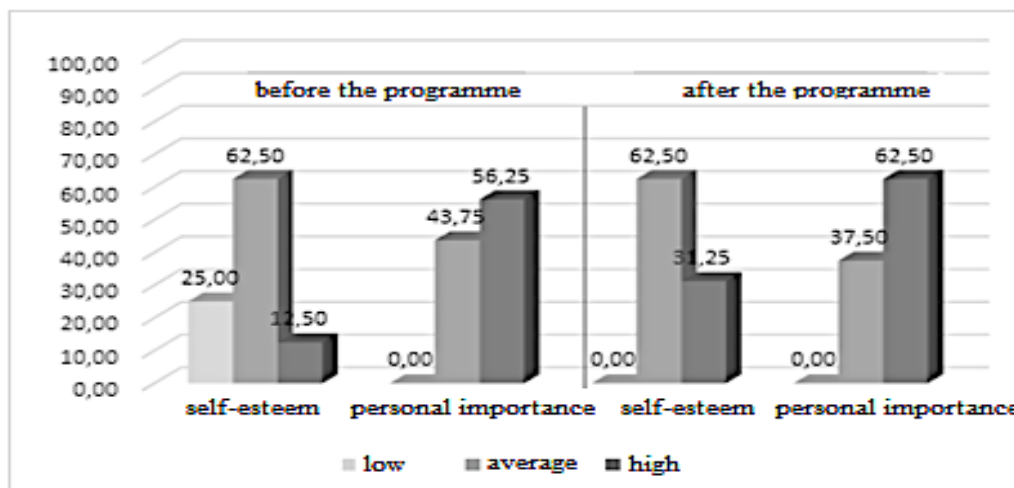


Figure 03. Findings of the self-evaluation of the functional characteristics of the physical self and the personal importance of the physical self characteristics before and after the implementation of the programme based on the technique of studying the self-relationship to the physical self image by Cherkashina

The self-evaluation of the functional characteristics increased drastically. The subjects noted an improvement of general well-being and such characteristics as speed, agility, flexibility, strength, and stamina. In our other studies (Dolgova, Belousova, Mamylna, Vorozheykina, & Bogachev, 2017) and the studies of our colleagues (Botvinick & Braver, 2015, Rean, 2012) the change in the functional characteristics due to physical activity was highlighted as well. The originality of this study is showcased in an original psychocorrection programme of the development of self-esteem of middle-aged women.

The percentage of low self-evaluation of the functional body characteristics dropped from 25% to 0%. The percentage of average self-evaluation dropped from 62.5% to 44% due to the overall increase in self-esteem. The percentage of high self-evaluation rose from 12.5% to 56%. The personal importance of the functional characteristics increased from 56% to 62% as well.

Based on the findings of all the techniques we can state that the implemented psychocorrection programme was effective for most of the subjects. The statement corresponds with the findings of other researches (Leary, Jongman-Sereno, Diebels, & Raimi, 2015; Shemanova, 2012).

To test the study hypothesis that self-esteem of women would change due to the psychocorrection programme we conducted a mathematical treatment of the obtained data using the Wilcoxon T test. We compared the results of the first and the second self-evaluations of the subjects based on the Ideal-self and Real-self technique by S.A. Budassi.

We used this technique to perform the Wilcoxon T test as it displayed the increasing correspondence between the real-self and the ideal-self therefore showcasing the occurred changes in self-esteem of the subjects.

Hypotheses:

H0: The increase rate in self-esteem does not exceed the decrease rate in self-esteem.

H1: The increase rate in self-esteem does exceed the decrease rate in self-esteem.

$T_{emp}=6$ for $n = 16$.

$T_{crit}=23$ for $\rho \leq 0.01$; $T_{crit}=35$ for $\rho \leq 0.05$.

We chose a value loss as a specific distribution.

$T_{emp} < T_{crit}$, the calculated T_{emp} is within the significance level, therefore H1 hypothesis is correct.

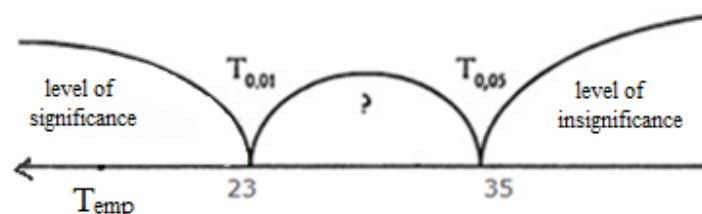


Figure 04. The levels of significance and insignificance of the Wilcoxon T test

Thus, due to the implementation of the programme self-esteem of middle-aged women, the basis of self-esteem, has changed. The study hypothesis was confirmed

7. Conclusion

The study showed that as a result of the implemented psychocorrection programme the majority of the subjects experienced the change in self-image and perception of personal qualities. Working in groups helped the subjects to increase the self-knowledge and learn what impression they leave on others, therefore developing their social self and reducing their blind self. The discrepancy between the real-self and the ideal-self became less pronounced in majority of the subjects. It is fascinating that not only the rankings of the real-self qualities changed, but also in some cases the subjects changed their mind about their ideal-self qualities, therefore the ideal-self changed as well. The correction programme also considered the secret-self and the suppressed-self. It influenced the perception of the subjects of themselves and brought their real-self closer to their ideal-self.

The level of reasonable rigidity of the self-assessment increased.

The self-evaluation of the anatomic and functional body characteristics increased drastically. The subjects noted an improvement of general well-being and such characteristics as speed, agility, flexibility, strength, and stamina.

Based on the findings of all the techniques we can state that the implemented psychocorrection programme was effective for most of the subjects

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