PSYCHOBIOLOGICAL DETERMINANTS OF PSYCHOLOGICAL WELL-BEING OF AN INDIVIDUAL

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Abstract. This article examines one of the central problems of positive psychology - the identification of biological determinants of psychological well-being of an individual. The importance of researching the psychological well-being of an individual is determined by the social demand for identifying the content characteristic of this phenomenon, its links with other factors, both socio-psychological and biological. To date, science is equipped with data on psychological well-being, such as its structure and knowledge of the factors affecting this phenomenon. However, the study of psychobiological determinants of psychological well-being of an individual is outside the sphere of scientific analysis. The method of theoretical analysis of scientific literature and the methods of statistical data processing, in particular the Pearson correlation ratio and the Mann-Whitney U-test to solve the problems posed, were used. The study included the use of a set of standardized psychodiagnostic methods of questionnaire type. In the course of empirical study, we established that the psychological well-being of an individual had a direct relationship (p≤0.01) with social ergity, and object plasticity (p≤0.01); with a social rate (p≤0.01). A statistical comparison according to Mann-Whitney U-test showed that the formal dynamic properties of individuality were more developed in respondents with a high level of psychological well-being. The results obtained in the course of study are of great theoretical and practical importance. So, we have the opportunity to develop the psychological well-being of an individual by influencing the psychological and social component of the psychobiological structure of individuality.

Key words: psychological well-being, subjective well-being, happiness, psychobiological determinants, formal dynamic properties of individuality.

1. INTRODUCTION

The picture of current events in the modern world indicates that society is permeated with aggression, conflict, cruelty, all this features have a negative impact on the psychological well-being of an individual. Transformation of this orientation pushes people to rethink the objective reality, universal values and norms of behavior, which first of all lowers the level of happiness in a person.

The problem of subjective and psychological well-being is very relevant today. Having originated not so long ago (in the 60-ies of the XX century), the psychology of happiness began to develop rapidly, as evidenced by numerous works in this area. Unfortunately, most of these works are not scientific, but popular, giving the reader a vision of this phenomenon from the subjective point of view of the author, which has not been confirmed by scientific methods. Also, similar literary publications, as a rule, reveal the essence of subjective well-being superficially, mainly answering the questions, for example, about differences in the level of happiness between residents of different countries or describing cases from the author's life and life of his acquaintances.

Since the 1990s, the phenomenon of happiness and psychological well-being has been actively studied within the framework of a special branch of psychological knowledge - positive psychology, created by the American scientist Martin Seligman. For a more unequivocal understanding, happiness was identified with subjective well-being in psychology (Seligman, 2012). The subjective and psychological well-being is difficult to study empirically, but the researchers do not abandon attempts to get closer to understanding the essence and mechanisms of happiness formation. Nevertheless, many aspects still remain unexplored and unstudied.

In our opinion, the empirical confirmation of hypotheses about the essence, structure and links of well-being with various variables is mandatory. Only on the basis of scientifically proven data we can approach the understanding of this phenomenon and give an answer to the question that worries, probably, every person - how to become happy?

There are changes in the sphere of social interactions in the world around us. People are committed to success and prosperity. If the ways to achieve material prosperity are more or less clear, then the situation with the psychological well-being is much more complicated. A great orientation of people to material values entails a change in moral norms and spiritual values. In turn, this generates changes in interpersonal interactions: people more often show cruelty, hardball and aggressiveness in the process of contact with surrounding people. As a result, a person can fall into a deep depression because of the stresses in his life.

The importance of researching the psychological well-being of an individual is determined by the social demand for identifying the content characteristic of this phenomenon, its links with other factors, both socio-psychological and physiological. Since ancient times a human leans toward mental and psychological balance, finding well-being, which is quite natural for human nature. Therefore, it is not surprising that the psychological well-being of an individual is often defined as the subject of research by foreign psychologists. At the present time, science has data on psychological well-being, such as its structure (Ryff, 1995) and knowledge about the factors that affect this phenomenon (Bradburn, 1969) (Diener & Chan, 2011) (Seligman, 2011). However, the study of psychophysiological determinants of psychological well-being of an individual is outside the sphere of scientific analysis. Therefore, it is possible to approach the solution of the problem of revealing the biological and physiological components of an individual, which determine his psychological well-being.

The purpose of the study is to reveal the psychobiological determinants of psychological well-being of an individual.

The hypothesis is the psychological well-being of an individual, which is determined by the psychobiological components of individuality.

The methodological basis for the study was the concept of psychological well-being of domestic and foreign researchers, namely, the concept of the essence and structure of this phenomenon of (Bradburn, 1969) (Ryff, 1989) (Diener, 1984) (Voronina, 2005) (Dzhidaryan, 2013). It should also be noted the theory of formal dynamic structures of individuality of V.M. Rusalov (2007).

The theoretical significance of the study is determined by the fact that the study of psychobiological determinants of psychological well-being contributes to the development of positive, social, and general psychology. The data obtained during the research does not contradict the
existing approaches to the structure of psychological well-being, but complement and expand them.

The practical significance of the study lies in the possibility of introducing the data obtained during the research into the practical work of psychologists aimed at developing the psychological well-being of an individual.

2. MATERIALS AND METHODS

The material for the study was the results of psychological diagnosis of students of the Kazan Federal University aged 18-23 years old.

To achieve this goal and test the hypothesis, we used the following research methods: theoretical - analysis of scientific literature on the research problem; empirical: interrogation method, psychodiagnostics; methods of empirical data statistical analysis.

The diagnostic study included the use of a set of standardized diagnostic techniques of questionnaire type. A set of psychodiagnostic techniques enabled us to diagnose the psychological well-being, subjective well-being (happiness) of respondents, their formal dynamic properties of individuality. We used the following techniques in the study: Ryff's Scales of Psychological Well-being (Pergamenschik & Lepeshinsky, 2007); Questionnaire of formal-dynamic properties of individuality (Rusalov, 1997).

The reliability of the research results was provided by the scientific validity and consistency of the initial theoretical positions; support on the fundamental theories of foreign and Russian psychology; application of just, valid, reliable, proven psychodiagnostic research methods; representativeness of the research sample; complex use of standard methods of mathematical statistics, in particular, the Pearson correlation ratio and the Mann-Whitney U-test in the IBM SPSS Statistics 21 computer package.

3. RESULTS AND DISCUSSION

To clarify the conditionality of the psychological well-being of an individual with the psychobiological determinants, we analyzed the links between the indicator "psychological well-being" with the psychobiological components of individuality and the reliability of differences in the test persons in the indicators studied.

The Pearson's correlation analysis for the whole group of test persons enabled us to identify the following links (Figure. 1):

1. Psychological well-being has a direct connection ($p \leq 0.01$) with social ergity. This shows that the development of the ability of an individual to master the surrounding world through the communications and in work, whose activities are directed at the society, is interrelated with the level of his well-being. The higher this development is, the higher the level of psychological well-being is.

2. Psychological well-being and object plasticity are directly related ($p \leq 0.01$). That is, the level of well-being will increase with the development of the abilities and capabilities of an individual to switch from one type of objective activity to another faster and easier, without much damage to the quality and effectiveness of the work performed.

3. The psychological well-being has also a direct relationship ($p \leq 0.01$) with a social rate. This means that the higher the speed of speech-motor acts is, the faster a person utters phrases and gives retorts, the higher the level of his well-being is.

![Figure 1. Correlation of psychological well-being of an individual](image)

Note: WB – psychological well-being of an individual; SP – subject plasticity; ST – social tempo; SO – social orientation.

Solid line – positive correlation, corresponding to a significance level of $p \leq 0.01$.

Thus, we can state the following: the more developed the desire of an individual to communicate, have social contacts and occupy a leadership position among these contacts is, the sooner he joins the process of communication and passes more easily from one topic to another, and
the higher the level of his psychological well-being. The same applies to the speed of motor acts of a person in his objective activity - the faster one’s ability to perform objective actions and operations, the highly developed the psychological well-being is.

To confirm the tasks, the respondents were divided into two groups. The first group consisted of respondents with a high level of subjective well-being, and the second - with a low level of it. A statistical comparison of the Mann-Whitney U-test for the independent samples showed that the level of social energy was significantly higher in the first group of test persons (p≤0.01) than in the test persons of the other group (Figure 2). This shows that the respondents with high indicators of subjective well-being are more active in the social sphere, they need social and communicative contacts, are sociable, prefer social forms of activity and strive for leadership, taking the leading position in society. Relying on the above, we can conclude that social ergity is an important component for the development of psychological well-being of an individual.

Psychological well-being is considered in connection with the factors that are predominantly of a socio-psychological nature.

The analysis of various domestic and foreign approaches to the study of individuality showed that the most meaningful psychobiological determination of the personality was described in the theory of formal dynamic properties of individuality by V.M. Rusalov. The formal dynamic properties of individuality are considered from two sides, subject and social, and include eight components: subject and social ergity, objective and social plasticity, subject and social emotionality and subject and social tempo.

Psychological well-being should also be considered from the point of view of determination by the psychobiological factors, which are also an important sphere of an individual. The term psychobiological factors mean the structures of human body and psyche inherent in him from birth and determining his behavior and activities.

In the process of empirical research we established that the psychological well-being of an individual was conditioned by the psychobiological components of individuality: subject plasticity (p≤0.01), social mobility (p≤0.01) and rate (p≤0.01).

A statistical comparison of the group with a high level of psychological well-being and the group with a low level of it made it possible to establish that the level of social energy was significantly higher (p≤0.01) in the first group of test persons.

5. SUMMARY

This work is devoted to the problem of identifying the psychobiological determinants of psychological well-being of an individual. The research conducted confirmed the initial hypothesis, the correctness of formulation of the research tasks.

In our opinion, the results obtained in the course of study are of great theoretical and practical importance. So, we have the opportunity to develop the psychological well-being of an individual by influencing the psychological and social component of the psychobiological structure of individuality.

It turns out that by forming the direction to create more communication links in an individual, developing his involvement in societal life, and the ability to maintain contact, we can develop the level

4. CONCLUSIONS

The psychological well-being is actively investigated in the framework of positive psychology. K. Riff developed the structure of this phenomenon, which included six components: personal growth, self-acceptance, autonomy, goals in life, positive relationships, and environmental management.
of his well-being, subjective and psychological, namely, to make this person happier. In summary, we can state that the psychological well-being of an individual is determined not only by socio-psychological factors, but by psychobiological components of individuality as well.

The scientific novelty of our study is that the structure of the phenomenon in question is presented to us as follows: in addition to the components specified by K. Riff, the psychological well-being is determined by a number of psychobiological components, namely, objective plasticity, social ergity and tempo. The data obtained during our research does not contradict the existing views to the structure of psychological well-being of an individual, but complement and expand them.

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