ABSTRACT

of the dissertation submitted for the degree of Doctor of Philosophy (PhD) in the educational program «8D03107 – Psychology» by **SHERALY BIZHAN** on the topic: «Correlation between a person's mental well-being and the level of his/her physical activity in a metropolis (using the example of student youth in Almaty)»

Relevance of the scientific research. In the 21st century, psychological well-being is regarded as one of the key indicators of sustainable social development. Its significance is enshrined in the UN General Assembly Resolution "Transforming Our World: The 2030 Agenda for Sustainable Development" (2015), which includes SDG 3 "Good Health and Well-being" and SDG 11 "Sustainable Cities and Settlements." No According to the WHO approach, health is understood as a state of physical, mental, and social well-being.

The growth of urbanization increases the relevance of studying factors affecting the well-being of the population in megacities. According to UN and WHO documents, the urban environment is characterized by risk factors such as hypothermia, high stress levels, environmental pollution, and information overload, which have an impact on human physical and mental health. For the Republic of Kazakhstan, strengthening public health and fostering an active lifestyle are priority areas of state policy, as reflected in the Code of the Republic of Kazakhstan "On People's Health and the Healthcare System" (2020), the Addresses of President K.K. Tokayev, and the "Healthy Nation" National Project for 2021–2025.

From a scientific and psychological perspective, the relevance of the study is necessitated by the need to clarify the mechanisms of correlation between physical activity and psychological well-being. According to Carol D. Ryff's concept, psychological well-being is a multi-component education that includes personal growth, autonomy, environmental management, and other components. At the same time, modern research shows that the relationship between physical activity and psychological well-being is heterogeneous and depends on a complex of personal factors.

The aim of the study is to identify the features of the relationship between the level of physical activity and psychological well-being of student youth in megacity conditions, as well as to determine the role of personal factors (perfectionism, emotional intelligence, and motivational regulation) as mechanisms mediating this relationship.

Research objectives:

1. Theoretical-conceptual. Analyze and synthesize existing theoretical approaches to understanding the indirect role of perfectionism, motivation, and emotional intelligence as mediators of the relationship between physical activity and the psychological well-being of student youth in urban environments.

2. Methodological. Select a valid battery of methods and test a theoretical model that allows for the quantitative assessment of the strength and direction of the indirect effects of perfectionism, emotional intelligence, and motivation type in the "physical activity → psychological well-being" chain.

3. Comparative cultural studies. Identify and describe cross-cultural differences in the manifestation of student perfectionism using the examples of megacities in China, Russia, and Kazakhstan.

4. Diagnostic-analytical. Determine the quantitative and qualitative parameters of physical activity (frequency, duration, intensity), as well as diagnose the characteristics of psychological well-being, perfectionism, motivation, and emotional intelligence related to various aspects of psychological well-being in megacity settings.

5. Applied. Based on the obtained data, develop scientifically grounded recommendations for improving educational work with student youth, as well as developing social policy and public health based on identified patterns regarding the relationship between physical activity and the psychological well-being of student youth in the metropolis of Almaty.

The object of the study: physically active representatives of student youth in the metropolis of Almaty.

The subject of the study is the relationship between the psychological well-being of student youth in the metropolis and their level of physical activity, mediated by personality variables such as perfectionism, motivation, and emotional intelligence.

The main hypothesis of the study is that the characteristics of a student's psychological well-being in a metropolis are linked to their level of physical activity.

Partial hypotheses:

1. The direct connection between subjects with different levels of physical activity and psychological well-being indicators can be found primarily at the level of a person as an individual.

2. The features of the manifestation of perfectionism as a mediator of the connection between physical activity and psychological well-being depend on the social situation of development and the cultural context of the individual.

3. There is an indirect relationship between psychological well-being indicators and perfectionist characteristics in subjects with different levels of physical activity.

4. There is an indirect relationship between psychological well-being indicators and motivational characteristics in subjects with different levels of physical activity.

5. There is an indirect relationship between psychological well-being indicators and emotional intelligence characteristics in subjects with different levels of physical activity.

The methods and methodologies of empirical research were selected in accordance with the purpose, object, subject, hypothesis, and objectives of the study. To implement the set tasks and verify the proposed hypotheses, methods possessing high reliability, validity, and wide application in modern scientific practice were utilized:

1) International Physical Activity Questionnaire (short version). The methodology for measuring physical activity was developed by the international research group IPAQ (C Craig et al., 2003) under the auspices of the WHO for ages 15-69.

2) C. Ryff's Psychological Well-being Scale. The methodology measures six components of psychological well-being: autonomy; environmental management; personal growth; positive relationships; life meaningfulness; and self-acceptance.

3) Randy O. Frost's multidimensional perfectionism scale was adapted into Russian by V.A. Yasnaya. In the Republic of Kazakhstan, this methodology has also been used and tested by many psychologists.

4) Emotional Intelligence Assessment (WLEIS). It includes four sub-scales: understanding one's own emotions; understanding the emotions of others; using emotions; and managing emotions.

5) Sports Motivation Scale SMS-6. The methodology allows for identifying exactly which motives underlie physical activity in a metropolis.

The conducted research has passed the approval procedure of the local ethics committee at Al-Farabi Kazakh National University (IRB-A1035 dated 06.02.2025).

The experimental basis of the study and the characteristics of the sample: Students from higher education institutions in the city of Almaty participated in the study. A total of 295 subjects participated. By gender, the sample consisted of 122 men (41.4%) and 173 women (58.6%). The age of the participants ranges from 17 to 24 years, with an average age of about 19 years. The criteria for inclusion in the study were residence in Almaty and sufficient understanding and proficiency in the Russian language. A total of 737 subjects participated in solving the comparative-culturological task.

Statistical data processing was performed using the SPSS software package (version 27.0) with subsequent visualization of results in the form of histograms, distribution diagrams, and tables. The application of Spearman's correlation analysis, Kraskel-Wallis's H-test, Mann-Whitney's U-test, and regression analysis methods ensures the statistical reliability of the obtained results.

The theoretical and methodological basis of the study is the anthropological approach of B.G. Ananyev, who considers man as a holistic biopsychosocial system integrating the levels of individual, personality, subject of activity, and individuality, as well as the self-determination theory of Richard M. Ryan and Edward L. Deci. S.L. Rubinstein's ideas on the unity of consciousness and activity, as well as the positions of M.M. Mukanov and L.S. Vygotsky on personality development within the system of social relations and the cultural environment, were of great importance. The systemic basis of the study was formed by the propositions of V.A. Hanzen, who considers mental phenomena as elements of a holistic system functioning in the interconnection of categories of time, space, energy, and information. The theoretical basis for studying psychological well-being was the work of Carol Ryff. C. Ryff's model, which views psychological well-being as a multidimensional characteristic of an individual's positive

functioning, including self-acceptance, autonomy, environmental management, positive relationships, life goals, and personal growth, was of particular importance.

The theoretical significance of the study lies in expanding scientific concepts regarding the relationship between physical activity and the psychological well-being of an individual in an urbanized environment.

It has been clarified that physical activity is not a universal factor of psychological well-being, but is linked to it through a system of personal self-regulation. It has been shown that various components of psychological well-being according to K. Riff's model have unequal sensitivity to physical activity, with the most close connection identified with the component of personal growth.

The role of perfectionism, emotional intelligence, and motivation as key personal mechanisms ensuring the link between physical activity and psychological well-being has been theoretically substantiated. The obtained results contribute to the development of the systemic approach of V.A. Hanzen, confirming that psychological well-being is formed under the influence of behavioral, personal, and environmental factors.

The study also expands the understanding of the influence of the metropolis as a special life environment in which the importance of personal self-regulation resources increases, and physical activity acts as an important factor in the psychological adaptation of the individual.

The practical significance of the study lies in the possibility of using its results to develop scientifically grounded programs for increasing physical activity levels and psychological well-being in megacity settings.

It has been established that the effectiveness of physical activity as a resource for psychological well-being is determined not only by its quantitative characteristics but also by the features of perfectionism, motivation, and emotional intelligence. This allows for the development of differentiated approaches to the psychological support of physical activity.

The research results can be applied in psychological counseling, the system of psychological support for students, the development of preventive and health-improving programs in educational organizations, the activities of sports psychologists and coaches, and the creation of public health programs aimed at popularizing physical activity.

The practical value of the work lies in the development of recommendations for forming internal motivation for physical activity, developing emotional self-regulation, reducing the influence of maladaptive perfectionism and external motivation, and integrating physical activity into daily life. The obtained results can be used in psychology, education, healthcare, and social policy to improve the quality of life for young people in the metropolis.

The scientific novelty of the dissertation research lies in the theoretical and empirical substantiation of the systemic nature of the relationship between physical activity and the psychological well-being of student youth in megacity conditions, taking into account personal, motivational, and emotional factors.

1. For the first time, within the framework of a study of student youth in Almaty, it was established that physical activity does not have a universal direct connection with all components of psychological well-being, but is primarily linked to the "personal growth" component of the C.D. Ryff model. This clarifies the understanding of the psychological significance of physical activity, linking it primarily to the dynamic characteristics of personality development, the realization of potential, and the desire for self-development.

2. The heterogeneity of the relationship between physical activity and psychological well-being has been theoretically substantiated and empirically confirmed. It has been shown that varying levels of physical activity are accompanied by changes in the structure of relationships between physical activity, personal characteristics, and individual components of psychological well-being, which complements the linear model of "more physical activity - higher well-being" with an understanding of its differentiated nature.

3. The scientific understanding of the psychological mechanisms of the relationship between physical activity and psychological well-being has been expanded by including perfectionism, motivational regulation of physical activity, and emotional intelligence as personality-regulatory characteristics in a unified research model. It has been established that adaptive components of

perfectionism, autonomous forms of motivation, and intrapersonal components of emotional intelligence have the most pronounced relationship with psychological well-being.

4. The specific structure of perfectionism in the context of physical activity has been identified. It has been established that a higher level of physical activity is primarily associated with the constructive characteristics of perfectionism - personal standards and self-organization, while excessive concern over mistakes, parental expectations, and parental criticism do not reveal statistically significant differences between groups. This allows for the consideration of adaptive characteristics of perfectionism as a resource for goal setting, organization, and self-regulation.

5. The place of motivational regulation in the system of correlation between physical activity and psychological well-being has been clarified. It has been established that as the level of physical activity increases, the severity of internal, identified, and integrated regulation related to personal growth, life goals, and environmental management increases.

6. The concept of the role of emotional intelligence has been expanded. It has been established that differences between groups with different levels of physical activity primarily manifest in the ability to realize and regulate their own emotions, while the ability to evaluate the emotions of other people does not reveal statistically significant differences. The identified links between emotional intelligence and psychological well-being and its prognostic significance for personal growth allow for the consideration of intrapersonal emotional regulation as a significant psychological resource.

7. An integrative model of the relationship between physical activity and psychological well-being has been developed and empirically tested, in which physical activity is presented as a behavioral component, perfectionism, motivational regulation, and emotional intelligence as personality-regulatory characteristics, while psychological well-being is presented as a multi-component system of positive personality functioning.

8. The dependence of the structure of psychological relationships on the level of physical activity has been identified: at a low level of activity, a predominantly compensatory structure of relationships is observed; at a medium level, a more complex transitional structure; and at a high level, a more integrated structure in which personal, motivational, and emotional resources are more closely linked to personal growth, life goals, and environmental management.

Thus, the scientific novelty of the study is to reveal the differentiated psychological structure of the relationship between physical activity and psychological well-being, in which the importance of physical activity is considered in connection with the personal, motivational, and emotional characteristics of student youth.

Main provisions submitted for defense: 1. The selective nature of the relationship between physical activity and psychological well-being. Physical activity is linked to the psychological well-being of student youth selectively rather than universally: the statistically significant direct link is most clearly manifested with the "personal growth" component of the C.D. Ryff model. This indicates that physical activity is primarily linked to the dynamic aspects of a person's positive functioning - a sense of development, the realization of potential, and the desire for personal improvement.

2. The systemic nature of the relationship. The relationship between physical activity and psychological well-being is characterized by a mediated and systemic nature, as its expressiveness and orientation are linked to a set of personality-regulatory characteristics including perfectionism, motivational regulation, and emotional intelligence.

3. Perfectionism as a differentiated personal resource. The adaptive components of perfectionism - personal standards and self-organization - are positively linked to psychological well-being and a higher level of physical activity, allowing them to be viewed as a personal resource for goal-setting, organization, and self-regulation of activity. At the same time, the maladaptation components - excessive concern about mistakes, parental expectations, and parental criticism - do not show statistically significant differences between groups with different levels of physical activity.

4. Autonomous motivational regulation. The level of physical activity is related to the nature of motivational regulation: as it increases, the severity of internal, identified, and integrated regulation increases. Autonomous forms of motivation are linked to components of psychological well-being such as personal growth, life goals, and environmental management, indicating the inclusion of physical activity in the system of personal values and life orientation.

5. Emotional intelligence as a psychological resource. The intrapersonal components of emotional intelligence, primarily the awareness and regulation of one's own emotions, are linked to the level of physical activity and individual components of psychological well-being. Their prognostic significance is most clearly manifested in relation to personal growth, allowing for the consideration of emotional self-regulation capacity as one of the psychological resources for positive personality functioning.

6. Differentiation of the structure of relationships depending on the level of physical activity. The structure of relationships between physical activity, personal characteristics, and psychological well-being changes depending on the level of physical activity: at a low level, a predominantly compensatory structure of relationships manifests; at a medium level, it is transitional and heterogeneous; and at a high level, it is a more integrated structure of adaptive personal resources interconnected with components of psychological well-being.

7. Physical activity as a component of the psychological regulation system. In the context of a metropolis, physical activity can be considered not only as a behavioral characteristic but also as a component of the personality's psychological regulation system, interconnected with processes of goal-setting, self-organization, autonomous motivation, and emotional self-regulation, which in turn are linked to various components of psychological well-being.

Approbation and implementation of research results. The dissertation materials are reflected in articles and abstracts published in publications recommended by the COCSNVO of the Ministry of Higher and Secondary Specialized Education of the Republic of Kazakhstan: (Abai Kazakh National Pedagogical University Bulletin, "Psychology" series, 2025; Bulletin of the L.N. Gumilyov Eurasian National University, ("Psychology and Cognitive Sciences" series, 2026); in materials of international conferences (Almaty, 2024, 2025 (2); in a publication indexed in the Scopus and Web of Science databases ("Cultural and Historical Psychology," 2025; "Theory and Practice of Physical Culture," 2025; International Journal of Sports and Exercise Psychology, 2026).

Structure of the dissertation work. The dissertation consists of an introduction, three chapters, a conclusion, a list of references, and appendices. The bibliographic list includes 345 titles. The work presents tables and figures reflecting the theoretical model, research design, and statistical processing results.

Brief conclusion on the research results. The results obtained confirm the presence of a systemic and differentiated relationship between physical activity and the psychological well-being of student youth in megacity conditions. A direct statistically significant relationship was identified with the "personal growth" component, which characterizes a person as an individual. It has been established that students' physical activity and psychological well-being are indirectly linked to adaptive characteristics of perfectionism, internal motivational regulation, and intrapersonal components of emotional intelligence. Different structures of psychological relationships have been established at low, medium, and high levels of physical activity. In total, the results allow for the consideration of physical activity as a significant behavioral resource associated with personal development, self-regulation, and the positive functioning of student youth in megacity settings.