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Klymenko L. O.

Bogomolets National Medical University, Kyiv, Ukraine

INFLUENCE OF IDEOLOGY ON PSYCHOLOGICAL THOUGHT: HISTORICAL ASPECT

E-mail: rfpbvrj@ukr.net
ORCID: https://orcid.org/0000–0002–0591–9265

Abstract. This article describes the ideological distortion of achievements and teachings of I. Pavlov by party structures. The author of this article emphasizes the close connection of the development of the physiology of the nervous system with the state of psychology and tendencies of philosophical thought in the 40–60s of the XX century. The well-founded methodology and the richness of experimental techniques in the physiology of HNA had a decisive influence on research in the field of the physiological foundations of human behavior, however, slowing down the development of those studies that did not meet into the definition of the physiology of HNA. In this article the ideological influence will be analyzed on the example of decisions of Joint session of the USSR Academy of Sciences and the Academy of Medical Sciences (1950) in the development of physiological science in the USSR. Based on the historical analysis will be determined the moral and scientific consequences of the negative discusses. Because the this session deepened the crisis in psychology. There was an attempt to displace psychology, replacing it with the physiology of higher nervous activity.

Keywords: physiology of HNA, psychology, ideology, Academy of Medical Sciences

Клименко Л. О.

Національний медичний університет імені Богомольця, Київ, Україна

ВПЛИВ ІДЕОЛОГІЇ НА ПСИХОЛОГІЧНУ ДУМКУ: ІСТОРИЧНИЙ АСПЕКТ

Анотація. Висвітлено ідеологічне спотворення досягнень та вчення І. Павлова партійними структурами. Зазначено тісний зв'язок розвитку фізіології нервової системи зі станом психології та тенденціями філософської думки 40–60-х років XX століття. Обґрунтована методологія та багатство експериментальних прийомів у фізіології ВНД мали вирішальний вплив на дослідження у сфері фізіологічних основ людської поведінки, однак, неправильне тлумачення цього розділу фізіології уповільнило розвиток тих досліджень, які не відповідали визначенню фізіології ВНД. Проаналізовано ідеологічний вплив на прикладі рішень Об'єднаної сесії Академії наук СРСР та Академії медичних наук СРСР (1950) у розвитку фізіологічної науки в СРСР. На основі історичного аналізу будуть визначені моральні та наукові наслідки негативних дискусій, оскільки ця сесія поглибила кризу в медицині, фізіології та психології. Була спроба витіснити психологію, замінивши її фізіологією вищої нервової діяльності.

Ключові слова: фізіологія ВНД, психологія, ідеологія, Академія медичних наук.

Introduction. Questions of the relationship between scientists and government, the influence of ideology on the development of science, including psychology, were and remain relevant in the history of science. Ideological issues in psychology in the USSR were particularly acute problems. Many nihilistic and unviable ideas, such the idea of the «decline of Europe», the idea of futurism, the idea of the «association» of physiological and mental, or the so-called «Pavlovization» of science, found their ideological expression in the controversies of the historical formation of psychology in Soviet Ukraine. Pavlov's

teachings on reflexes were raised to the level of ideology by the authorities in the Soviet Union and it has imposed ideological guidelines in scientific research, but late it turned out to be only unscientific wishes.

At the end of the twentieth century, these ideas were criticized and widely described by historians of science in the scientific literature. Despite this, today we can see a misinterpretation of certain events in science in the 40–50s of the twentieth century.

History has many facts of inhibition in the development of new scientific fields in cases where philosophy has been given the political right to dictate to science the concrete ways of its development. In Soviet times there was a certain traditional interpretation of the influence of ideology on the formation of psychological thought and the development of the individual in general, which is associated with the social orientation of building a communist society. In 30–50s years, psychologists and psychological thought as a whole are suffered an ideological pressure by the authorities in the USSR. The teaching of the famous physiologist I. Pavlov were raised to the level of ideology in order to influence of the political-power structures on scientific society. It should be noted that in Ukraine scientists-psychologists conducted their research, adhering to the cultural-humanistic orientation, especially the development of issues of creativity and creative person occupied a dominant position in psychological research, but it was suppressed by the Soviet ideology, and eventually was abolished administratively in the 30–40's of the last century [16].

The study of methods of research in psychology has been interested by scientists of the whole world. It should be noted that I. Pavlov was the first scientist who had proposed an objective method in the study of human psychic phenomena. The main focus of the research of Pavlov was an experimental analysis of the activity of the cerebral hemispheres. This became possible due to method of conditioned reflexes. But the problem of the relationship between the mental and the brain has deep historical traditions and dates back to the time of antiquity. Turning to ancient history, we can see that questions about the nature of mental phenomena were interested by philosophers as well as doctors. In their representations there are separate some guesses about the connection of mental activity with the brain. Thus, the well-known physician and philosopher Alkmeon Krotonsky (IV–V BC), who was the author of the first antique Greek medical treatise, considered that the source of knowledge is in the brain not in the heart. Famous Greek physicians Gerofil, Erazistrat in first concluded that the brain is the center of the whole nervous system and the organ of thinking [2]. In beginning of the 19th century there were a lot of significant discoveries structures of the brain by F. Gall, P. Flurans, O. Deuteres, P. Brock, Wernicke and other [20].

Important elements of this prehistory are also interesting facts obtained by Rene Descartes, Charles Sherrington, Friedrich Goltz and other. The turning point in the research of brain activities is associated with I. Sechenov investigations. In his work «Reflexes of the brain» I. Sechenov makes a brilliant attempt to explain human behavior as a complex reflex act [18].

Consequently, I. Pavlov had the valuable information for the study of brain properties. He was the creator of the doctrine of higher nervous activity, an innovator of research methods in physiology and psychology. An abundance of experimental techniques in the physiology of HNA have had a decisive influence on research of human behavior and psychological phenomena. However, this methodology inhibited the development of those studies that did not fit into the physiology of the HNA. It was used by party leaders for ideological pressure on scientific community.

The aim of this article is to provide an objective analysis of trends in the development of psychological thought in Ukraine in the 40–50 years of the twentieth century in the context of the socio-political situation in the country.

Therefore, the tasks of our research are:

1) to give an objective review of the significance of the doctrine of Pavlov for the development of psychological thought;

2) to reconstruction the negative influence of ideology on the development of science

3) to reveal the negative role of the "Pavlov session" on the development of psychology in Ukraine.

Historiography. The problem of ideologizing of the Pavlov's teachings covered in the scientific literature rather fragmentarily. Back in 1987, the magazine «Questions of the History of Natural Science and Technology» organized a round table «Pavlov's session 1950 and the destiny of Soviet physiology», where a negative estimation to this session was given. In 1989, the 3rd All-Union Conference on the History of Physiological Sciences (Gurjaani) was taken place to discuss and critically assess the situation in physiology, which developed after the decisions of Joint session of the USSR Academy of Sciences and the Academy of Medical Sciences (1950) («Pavlov's session»). At this conference A. Hayrapetyan, E. Kostandov, L. Leibson, A. Roytbak, Yu. Duplenko et al were participanted. Their reports were devoted to various aspects of this session, the results of the process of politicization of science, the peculiarities of the development of some scientific areas, scientists whose destiny was distorted as a result of the session.

In foreign literature, isolated articles have been found that criticize the politicization of science. Thus, the Bulgarian scisentist T. Pavlov [13], giving a negative assessment of the decision of the «Pavlov session», considers undeserved criticism of the views of prominent Soviet scientists at this session, also he believes that it wrong to accuse them of underestimating the leading regulatory role of the cerebral cortex.

It should also be noted the treatise of the famous Leningrad professor V. Alexandrov «Difficult years of Soviet biology», published in 1992, in which the author gives a negative assessment of events in biology 40–50 years of the twentieth century [1].

The events surrounding the Ukrainian version of the "Pavlov session" are clearly insufficiently covered in the literature, only a few publications were found [5–7]. Some consequences of the «Pavlovization of psychology» in the 50's are described in the fundamental work on the history of world psychology V. Romenets [16].

A new look at the history of our society requires an in-depth analysis of the situation at the time, when the country was ruled by the Communist Party. There is a need for retrospective analysis of events in the physiological and psychological sciences in period of totalitarianism. The experience of overcoming the crisis phenomena that took place in Soviet society in those years is becoming important.

Methods and methodical instrumentation of the research: theoretical ones – historiographical and comparative analysis, the methods of systematization, generalization; empirical methods – the analysis of documents.

The results of the research and their discussion. For the first time in the world's physiology I. Pavlov proposed a fundamentally new method of studying the functions of the brain. At that time, the methods of physiological study of brain functions were partial or complete extirpation of the cerebral cortex and then electrical irritation of the cortex. This was only superficial description of the localization of functions of different parts of the cerebral hemispheres. Realizing the ineffectiveness of acute vivisectional methods, I. Pavlov sought way to observe living systems. He developed a method of conditioned reflexes. Using this method, I. Pavlov researched of the laws of the brain through study of the behavior of higher animals. Before Pavlov only a few physiologists performed such experiments, but rarely as an exception to the general rule for using an acute experiment (Heidenheim, Golz, Luciani).

Conditioned reflex which had been described by Pavlov became an active laboratory instrument for the physiological experiment, to achieve the best physiological data. Pavlov and his collaborators quite detail described the laws of occurrence, development and extinct of conditioned reflexes. By the method of conditioned reflexes Pavlov found and studied in detail the rules of analytical and synthetic activity of the cerebral cortex. He claimed that this activity is carried out by means of two main cortical processes – excitation and inhibition. Investigation of simple and complex conditioned reflexes, processes of cortical inhibitionand excitation made it possible to form a notion of higher nervous activity. Pavlov believed that HNA is a mental activity or behavior was defined as a reflex regulation of the relationship between the organism and the surrounding environment. In these connections of a brain the

true relations between events of the brain and of surrounding reality are reflected. He said: «It must be assumed that the formation of temporal connections, that is, these 'associations,' as they have always been called, is understanding, it is knowledge, it is the acquisition of new knowledge.» [14, p. 579]. At that time the behavior are researched by well-known psychologists Leslie, Keller, Wertheimer and others. They stood at the positions of Gestalt psychology. Thinking is subject to the general laws of the formation of forms, or gestalt. A living creature appears only as a carrier of mental processes occurring in the brain, and not as a real active individual. Wolfgang Köhler believed that there was no fundamental difference between the human intellect and the anthropoid.

In the last years of his life Pavlov began studying the higher nervous activity of a person in a psychiatric hospital. As a result of intense work in the clinic, the scientist achieved high results in the knowledge of the essence of some disease-causing phenomena as well as in the activity of the central nervous system. He put forward the concept of a specific second signaling system, inherent only to human. It is associated with the language of human [12].

In next scientific researches Pavlov began to note the new characteristic features of the word as a specifically human conditional stimulus, which causes a high degree of human development. The specificity of the second signaling system lies in the fact that the speech signals «represent a deviation from reality and allow generalization, which is our specially human, higher thinking» [11, p. 232–233]

Pavlov's teaching had a significant influence not only on the development of physiology, but also on the development of psychology. Since 1931 in the psychology of the Soviet Union a new interpretation of the subject of psychology has appeared – the psyche, human consciousness as a property of the brain. Higher nervous activity is a concept introduced by I. Pavlov, for many years identified with the concept of "mental activity". Thus, the physiology of higher nervous activity was interpreted as the physiology of mental activity, or psychophysiology.

In Soviet science, L. Vygotsky was the first psychologist, who try to express the idea of the systemic organization of the brain. In article «Psychology and the teaching about the localization of mental functions» he wrote that «the function of the brain as a whole is a product of the integral activity of dismembered, differentiated and again hierarchically unified functions of individual brain regions. The specific function of each inter-central system is primarily to provide a completely new productive form of conscious activity, and not just inhibitory or excitatory activity on lower centers» [4, p. 170]. Thus, the scientist tried to explain that it is impossible to equate the higher nervous activity of man with psyche.

Although the discovery of laws of the functioning of the cerebral cortex by I. Pavlov werethe most important conquest of physiological thought and have been recognized throughout the world, it couldn't be the laws that described psychological phenomena. Unfortunately, in the 30's and 50's of the twentieth century his theory was politicized by the higher authorities, which led to a wrong interpretation of the doctrine of I. Pavlov as a rules to study psychological processes. Progress in the physiology of higher nervous activity is quite multifaceted, but it is impossible to convert all psychological phenomena to HNA. For example, progress in modern physics is based on the achievements of Newton, but in no way to reduce to them.

In 1950, the so-called «Pavlov's session» took place, which devoted to problems of psychology and physiology. It was United session of the Academy of Sciences of the USSR and the Academy of Medical Sciences of the USSR that took place in Moscov [10]. At this session, it was about the need to revive the Pavlov's doctrine. Unfortunately, a number of scientists have been sharply criticized for deviating from this teaching. According to the decision of the Joint Session, similar sessions were held in many republics, in particular, in Ukraine. It is fair to say that the events that took place at the session in Ukraine were less dramatic. Only works of G. Kostyuk and works his students were criticized [3].

Only at the VIII All-Union Congress of Physiologists, Biochemists and Pharmacologists, held in Kiev in May 1955, the decision of the session of the two academies and the activities

of the Scientific Council were condemned as illegal and the rehabilitation of L. Orbeli, I. Beritashvili P. Anokhin, M. Rozhansky and others scientists was beginning [15].

The consequences of the «Pavlov's session» were very dramatic for psychology. Unfortunately, the name of this great scientist was used to establish unanimity in the science and country by party leadership. After this session there was a violent introduction of Pavlov's doctrine into psychology. The drama of the situation was amplified not only by the violent introduction of the Pavlov's methodology in the activities of scientific institutions, but also by the profanation of the physiological teaching of I. Pavlov. Some scientists criticaly estimated wrong I. Pavlov's allegations concerning psychological phenomenas. These critical statements had prompted the organizers of the session to argue that these psychologists are hostile to the theory of higher nervous activity [10].

Organizers of the session determined the tendency to «eliminate» psychology, replacing it with the physiology of higher nervous activity. There was a directive – to explain all mental phenomena as having conditionally reflexive nature, for example, the process of forgetting is a conditioned reflex. If in the 20 years of the twentieth century, excessive enthusiasm for Pavlov's ideas was due to the introduction of the objective method of research in the psychological practice, then in the 40's and 50's in psychology there was a threat of unpromising unanimity. The introduction of the physiological doctrine of higher nervous activity led to profanation in psychological practice. The ability to control the human psyche, producing conditional reflexes under the influence of external stimuli, has prompted some psychologists-careerists to argue that communist education can change the psyche of a person so that a new communist personality will be created. Exactly from these positions the attitude to study the human psyche researching new conditioned reflexes was given by leadership. Such a policy in medicine and psychology was especially dangerous. This position to psychological phenomena meant the loss of the subject of psychology. The introduction of the physiological doctrine of higher nervous activity in medical, pedagogical, psychological practice was reduced to absurdity.

Righteousness demands to say that in these times a cultural-humanistic direction of psychological research was established in Ukraine, which began in the 1920's thanks to the works of S. Rubinstein. Later this direction was represented by the leader of the national psychology G. Kostiuk, who admitet the idea of human personality. In the 50's of the twentieth century a study of the history of world and domestic psychological thought was began on the initiative and under the leading of G. Kostiuk. An important component of Kostyuk's scientific work is the elucidation of psychological preconditions for the effectiveness of pedagogical influences, the principles of an individual approach to students, and the requirements for the method of teaching as a way of organizing students' actions with educational material. The scientist does not reject the interaction of psychology as an independent science with related disciplines – physiology, pedagogy, sociology, logic, cybernetics. But underscore the need to justify the ways of this interaction, as related sciences mutually enrich each other and ensure their fruitful application in social practice [8].

It should be noted that in difficult conditions of totalitarianism, Ukrainian psychologists did their utmost to defend their science. But some psychologists have suffered from ideological pressure, among them S. Rubinstein, who was the coryphaeus of Ukrainian psychological science. He was universally erudite scientist and had a high creative inspiration. S. Rubinstein had his own original philosophical and psychological concept in the interpretation and understanding of thinking as activity. In explaining the psyche S. Rubinstein emphasized that the psyche is a process that is included in the continuous connection of human and the environment, the development of the human psyche must be studied in the process of its ontogenesis. The principle of reflex activity definitely extends to mental activity, but mental activity is not a passive reception of external influences. The psyche is a process and a result [17].

But in 1948–1949 S. Rubinstein was removed from work. It did not break the scientist he wrote a new monograph «Being and consciousness». The significance of a monograph can not be overestimated, it has not lost its appropriateness today, especially his idea of forming

a human personality now becomes important for the humanization of our science and society as a whole. The main idea in defining consciousness is embodied in the assertion of the unity of consciousness and activity. Specific for consciousness is the semantic content of it, which was formed in a person due to the development of language. The semantic content of consciousness is social education in accordance with the resolution of the «Pavlov session» in 1952 the first All-Union conference of psychology was convened in Moscow. By this time, the question of reformation had been already raised in the scientific environment of psychologists [9].

The peculiar organization of the discussion at this meeting impresses the reader. For example, B. Teplov scientifically substantiated the position that the psyche as a phenomenon subjective can be studied by objective method. But some psychologists rejected such an affirmation [9]. They proclaimed the statement that mental activity is a higher nervous activity, because this materialist doctrine was created by I. Pavlov. That is why it is necessary to replace psychology with the Pavlovian doctrine of higher nervous activity. However, there were a lot of participants of the meeting, who criticized such position, because it is a primitive version of the methodological reorganization of psychology. In general, the discussion at the meeting was less dramatic than at the session but psychology has suffered damage.

In the course of the so-called restructuring of psychology two views on the subject of psychology were determined by scientists: one view – psychology is a biological science, the methods of its research are determined by the works of I. Pavlov, the subject of psychology is the higher nervous activity of man; another view – psychology is a social science. But both of these views were false. To consider psychology only as a social science would be incorrect, because it ignored the connection between psychology and physiology. As the political leaders considered, the only correct solution at that time was the use of the dialectical materialist methodology for the development of psychological thought.

L. Vygotsky warned scientists to don't equate human behavior with the psyche. He wrote «Behavior without a psyche in man does not exist as well as a psyche without behavior.» [4, p. 76].

Officially, the circumstances changed in 1964, when the All-Union Conference on the Philosophical Issues of the Physiology of Higher Nervous Activity and Psychology took place. This was one of the most interesting events in development of psychology. Opinions of scientists expressed in the discussion of the problem, which phenomena are purely physiological, and which phenomena are psychological, were quite contradictory. Some scientists believed that the Pavlov's concept had lost its significance. In particular, M. Bernstein believed that physiology had entered a new, revolutionary period associated with the rapid development of cybernetics, and therefore it required a radical change in traditional ideas about life processes. Also he noticed that development of psyhology require the promotion of a new interpretation of psyhological phenomemons, using the achievements of cybernetics. He was supported by M. Grastenkov, L. Latash, I. Feigenberg, M. Bongard, Anokhin and other. Another group of scientists, such as E. Asratian, L. Voronin, Yu. Frolov, emphasized the great importance of the teachings of I. Pavlov in the history of psychology and physiology, for the nowadays as well as for the future.

Speeches at this meeting of Ukrainian scientists are of some interest for us. So, M. Logvin advocated the objective method of studying brain activity proposed by I. Pavlov. He noted that although electrophysiological and other new research methods have been developed and applied, the method of conditioned reflexes «should serve not only as one of the research methods, but as a general methodological basis for various experimental means of studying higher nervous activity» [19, p. 519].

Original opinion was expressed by physiologist P. Kostyuk. He stressed that human knowledge of certain phenomena has always gone from description to the disclosure of its essence, its mechanism, nature. That is why, as the scientist emphasizes, the development of physiology of higher nervous activity should be a consistent transition from «describing the activities of complex systems to penetrate deeper and deeper into their mechanisms, not

only to learn the properties of the elements underlying these mechanisms, but also with in order to know how the whole system works» [19, p. 659].

P. Kostyuk identified the main aspects of the study of the physiology of higher nervous activity: 1) the study of a specific mechanism of information processing by neurons, in which an important role belongs to the main physiological processes – excitation and inhibition; 2) changes in information at all parts of the system; 3) the connection of these changes with the structure of the nervous system. According to the scientist, the tasks selected by him are relevant at the present stage and it will remain relevant in the future. Deviations from their implementation can seriously hamper the development of domestic science, and thus it leads to lag behind the world. P. Kostyuk noted the thesis about the integration of research at all levels of the organization, including molecular and cellular using biochemical and microelectrode studies of neurons. He believed that study of cellular processes at the level of individual neurons would allow scientists to give conclusion about the relationship of individual elements of the system and the system as a whole. P. Kostyuk emphasized: to understand the complexity of physiological processes occurring in the brain, you need to master them by studying from system to element and from element to system [19, p. 659].

Representatives of S. Rubinstein's school took a compromise position, they advocated the integration of mental and physiological. V. Orlov, developing the ideas of S. Rubinstein, argued that the mental – is «ideal (spiritual) activity of the material brain» [19, p. 647]. He denied the «reflexology» in research of the psyche and noted that there would be no departure from materialism if the concept of conditioned reflex was given a purely physiological meaning.

The interesting position was taken by psychologist G. Kostyuk, who represented the Institute of Psychology of the Ministry of Education of the URSR. G. Kostyuk disagreed with those physiologists who denied the legitimacy of the question of the originality of the mental, referring to I. Pavlov. G. Kostyuk reminded the audience that I. Pavlov recognized the specificity of the mental, but insisted on the need for a materialist explanation. G. Kostyuk noted that attempts to convert the psychological to the physiological simplify the idea of human, impoverish the human personality. The idea of the inadmissibility of transforming the mental to physiological supported and A. Yemchenko, who represented Kyiv State University [19].

It should be noted that the controversy that arose at this meeting had much in common with similar discussions taking place around the world at the time. But the specificity of discussions that took place in the Soviet Union was proclamation of materialism. That is why all the reports were interpreted from the standpoint of dialectical materialism. But in reality this could mask the true sence of scientific reasoning. Despite some contradictions at the All-Union Conference on Philosophical Physiology of Higher Nervous Activity and Psychology, they cannot be equated with discussion that happened at the "Pavlov's session" and extrapolate to the nature of the discussion of the Pavlov doctrine in 40–50 years of the twentieth century. All participants of the meeting 1964 freely expressed their views on the issues to be solved. During the discussion, scientists reached a compromise. It is necessary to recognize that a progressive moment was the decision of the meeting that encouraged the participants to further creative development of psychology through critical overcoming of incorrect assessments of modern reflex theory. Also in the decisions of the meeting participants gave a critical assessment of the Joint Scientific Session of the USSR Academy of Sciences and the USSR Academy of Medical Sciences, devoted to the problems of physiological teaching of Academic I. Pavlov.

Conclusions. The example of imposing the teachings of I. Pavlov shows that even in fact the real prerequisites may not lead to the temple of knowledge. In the 1930's and 1950's, «Soviet physiological science» reduced to dogma the results of many scientific studies (Pavlov's conditioned reflexes, the dialectic of inhibition due to excitation, parabiosis, dominance, etc.) and anathematized everything else, including cybernetics as «mechanism and metaphysics». The cultural and humanistic orientation in the psychology of Ukrainian scientists, having flourished in the 1920s, was administratively suppressed by the dominant ideology in the 1930s and 1950s. The psychophysiological problem was solved in the context of Pavlov's doctrine of conditioned reflexes and higher nervous activity. The authorities tried

to create a situation where psychology would serve ideological problem. Finally, already in the 60s of the twentieth century, rejecting the ideological principles of theoretical research, Ukrainian psychologists again began to freely protected the humanistic principle in psychology.

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