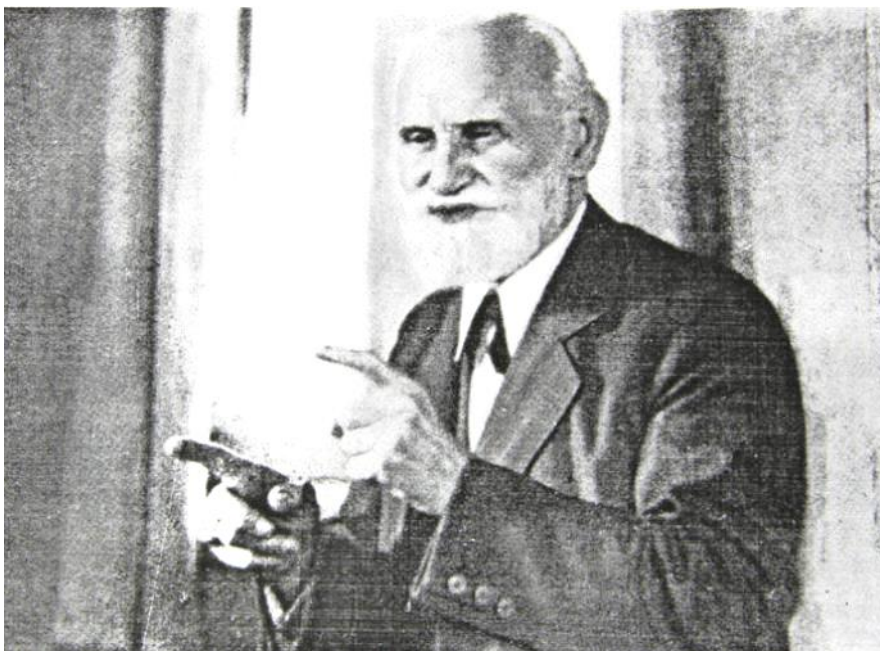


YIS Volume 9- 2021

ONE DOG IS ENOUGH: IVAN P. PAVLOV'S CONTRIBUTIONS TO IDIOGRAPHIC SCIENCE

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Charlotte, NC: Information Age Publishers

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Chapter 4

Ivan Pavlov in contemporary Russian psychological discourse

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There is a kind of a paradox - everyone in Russian psychological community knows the name of Pavlov, but not much about him one can find in the contemporary psychological discourse. Why is this? Is that indifference, lack of interest? The emotional intensity occurring in the statements about Pavlov contradict this conclusion: on the one hand, they are praising and enthusiastic (Chuprikova, 2016; Yaroshevsky, 1995, 1996) on the other, angry and accusatory (from those, who associate with Pavlov the forced “materialization” of Soviet psychology (Bratus, 2014; Reshetnikov, 2018).

Pavlov contributed substantially to Russian psychology. Undoubtedly, his contribution was important not only for Russian science and not only for psychology. The significance and versatility of his work is acknowledged by Russian psychological community, and that is how it was highlighted in the paper on the 165th anniversary of the scientist by academician Mukhina (2014):

- Pavlov developed a qualitatively new laboratory method for objective investigation of the highest forms of adaptive activity of animals and humans (i.e., behavior) which opened a new stage in the development of physiological science.
- Pavlov revealed the adaptive-evolutionary meaning of conditioned reflexes for living beings. His doctrine of conditioned reflexes strengthened the position of materialistic science in the study of mental phenomena, was a powerful argument in proving the possibility of studying the latter by an objective method.
- Pavlov not only assessed external manifestations of the conditional reflexes as observed from outside (i.e, *behavior* in psychologists' vernacular), but also localized the appropriate nervous processes in certain structures of the brain. The cerebral

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This work was supported by RFBR, project № 20-013-00260

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This work was supported by RFBR, project № 20-313-90004

cortex, from his point of view, was the center of temporary bonds, the ground of adaptive behavior of the animals.

- Pavlov clearly formulated the theory of analysers (sensory systems), in the nervous system, combining in it what was previously meant by the peripheral sensory organ, with all the nervous path along which afferent excitation runs to the cerebral cortex. This laid foundations for the experimental study of the conditioned reflex.
- Pavlov experimentally showed the presence of an inhibition process in the cerebral cortex, which had never been related to cortical cells before. By this, Sechenov's general intuition about the inhibitory effect of the brain was realized in a precise physiological concept.
- He revealed the laws of the dynamics of the processes of excitation and inhibition in the cerebral cortex. Numerous studies have shown the irradiation and concentration of these processes, their correlation and all kinds of "balancing". Because of all these dynamic transformations of cortical processes, the concept of the cerebral cortex as a mosaic of excitations and inhibitions was formulated.
- At the end of his life, Pavlov formulated the principle of the systemic nature of functioning of the hemispheres of the cerebral cortex. By that, he meant the ability of the cortex to form a "dynamic stereotype" from separately applied conditioned stimuli, thanks to which the integral work of the brain, continuing the established stereotype, turns out to be to some extent independent of the quality of external irritations.
- Matching laboratory investigations of the pathology of higher nervous activity with the clinic cases made it possible for Pavlov to put forward the idea of the "protective and healing role of inhibition," in particular, a number of symptoms of schizophrenia were explained from this point of view. The concept of protective inhibition was confirmed and widely used in the work of Pavlov's disciples during the World War II in military traumatology.
- His "doctrine of the types of the nervous system" gave a physiological ground to the four categories of temperament: sanguine, phlegmatic, choleric and melancholic assessed by Hippocrates.
- His technique for obtaining experimental neurosis opened a new area of research - the pathology of higher nervous activity. These studies constituted an brand new era in such purely "human" sciences as neuropathology and psychiatry.
- Investigations of the disciples of Pavlov on the role of the endocrine glands laid foundations of a new direction in the physiology of higher nervous activity.

Another evidence of the recognition by Russian psychologists of Pavlov's merits to psychology was that in 2000, according to the results of the National Psychological Competition "Professional Results of the Century"⁹⁰, announced by the Psychological

⁹⁰ https://psy.su/psyche/psyche_archive/2000/

Newspaper⁹¹, Pavlov became the winner in the nomination "Outstanding Contribution to World Psychology".

Yet, Pavlov is hardly popular among contemporary Russian psychologists, for example in comparison with Lev Vygotsky. The latter of these two most internationally acknowledged Russian psychologists occupies the #1 position in the list of the most cited authors based on publications in one of the main Russian journals in psychology *Voprosy Psikhologii*, and Pavlov is not included there at all. The list includes 112 authors that had been cited on the pages of the journal at least 10 times for 15 years, from 1988 to 2002.

Table 1 shows the first 60 authors, among which one can find 7 international figures (italicized).

Table 1.

Authors' citation index in the journal *Voprosy psikhologii*

for 15 years (1988-2002)⁹², first 60 authors

Author	Citation	Author	Citation	Author	Citations
Vygotsky L.S.	35	Smirnov A.A.	51	Tsukerman G.A.	37
Leontiev A.N.	21	Bakhtin M.M.	50	Menchinskaya N.A.	36
Rubinstein S.L.	15	Klimov E.A.	50	Vasilyuk F.E.	35
Davydov V.V.	16	Petrovsky A.V.	50	<i>Freud Z.</i>	35
Elkonin D.B.	14	Kon I.S.	49	Rubtsov V.V.	34
Chelpanov G.I.	14	<i>Engels F.</i>	47	Petrovsky V.A.	33

⁹¹ <https://www.psy.su/>

⁹² <http://voppsy.ru/indx.htm>

Luria	1	Matyushkin		E.A.	
A.R.	0	A.M.	4	Golube	
	6		6	va	31
Galper		<i>Jung K.G.</i>		Rusalov	
in P.	8		4	V.M.	
Ya.	8		6		31
Zinche		Kapterev P.F.		I.V.	
nko	8		4	Strakho	
V.P.	7		3	v	31
Lomov	7	<i>Piaget J.</i>	4	Blonsky	
B.F.	7		3	P.P.	30
<i>Marx</i>		Mamardashvili		Simerni	
<i>K.</i>	7	M.K.	4	tskaya	
	6		2	E.G.	27
Bozho		Chomskaya E.		Ponom	
vich	7	D.	4	arev	
L.I.	3		2	Ya.A.	26
Lisina		Chuprikova		P.V.	
M.I.	7	N.I.	4	Simono	
	1		2	v	26
Slobod		Tikhomirov		Shmele	
chikov	7	O.K.	4	v A.G.	
V.I.	0		0		26
Ananie	6	Merlin V.S.	3	<i>Anastaz</i>	
v B.G.	1		9	<i>i A.</i>	24
A.G.		Petrenko V.F.		Gurevic	
Asmol	6		3	h K.M.	
ov	1		9		24
A. V.		Abulkhanova-		Etkind	
Zapor	6	Slavskaya	3	A.M.	
ozhets	1	K.A.	7		22
Yaros		Bodalev A.A.		Zeigarni	
hevsky	5		3	k B.V.	
M.G.	6		7		21
Bratus	5	Ilyenkov E.V.	3	<i>Frankl</i>	
B.S.	3		7	<i>W.</i>	21
Brushli		Teplov B.M.		Leites	
nsky	5		3	N.S.	
A.V.	2		7		20

The difference is thought provoking. Vygotsky and Pavlov have in common not only the recognition by the international community. There is also an undeniable connection between their contributions to the development of psychology. Considering the links between the two most internationally known developments of Russian psychology, Natalja Chuprikova, a leading Russian neuropsychologist, notes:

“L.S. Vygotsky refers to I.P. Pavlov, in whose theory and research methodology he sees ... some kind of a “lighthouse” that can help lift psychology out of crisis... The

index of names to the work “Historical meaning of psychological crisis” shows that Pavlov is mentioned there 30 times and only in a positive, but not in a critical sense. Chelpanov as one of his major opponents is mentioned 22 times, Freud — 20 times, Bekhterev — 19 times, Münsterberg — 18 times, Stern — 15 times, Kornilov — 14 times, Wundt, Bühler, and Dilthey — 11 times, Koffka — 10 times, James and Thorndike — 9 times, Wagner and Blonsky — 6 times. The rest of the authors have fewer references. The issue is not only the number of references to Pavlov. The issue is that for Vygotsky, Pavlov is the scientist who created the methodology for studying brain activity and behaviour, which should serve as a model for the development of psychological methodology. The core of methodology for Vygotsky is a conceptual and terminological science language, which allows empirical facts to be described clearly, unambiguously, and logically, uniting them and making theoretical generalizations, i.e. the apparatus that unites facts and concepts ... However, the issue is not only the highest evaluation of I.P. Pavlov as a theorist and a methodologist in the study of higher nervous activity and behaviour. L.S. Vygotsky developed his cultural-historical theory of development of higher mental functions under the direct influence of the theory of conditioned reflex of I.P. Pavlov and his fundamental ideas about the qualitative difference between human higher nervous activity and behavior and those of animals due to the presence of the second signal system of a human, “grand signalistic potential of speech”. According to Pavlov, it was word that made us human beings, and Vygotsky’s cultural-historical theory of development of higher mental functions is about the same thing” (Chuprikova, 2016, p. 233)

Vygotsky at his time appreciated Pavlov:

Thanks to his methodological coherence, especially in language, Pavlov achieved great successes. From a chapter on the work of dogs’ salivary glands his research turned into the research of higher nervous activity and behaviour of animals, only because he used enormous theoretical knowledge for studying salivary secretion and created a transparent system of concepts that became the basis of science. Pavlov’s fidelity to methodological principles is amazing, and his book brings us into the laboratory of his studies and teaches how to create scientific language” (Vygotsky L. S. (1927), p. 363—364).

However, the idea of a close connection between Pavlov’s research and Vygotsky’s cultural-historical theory is not typical of the modern Russian professional community. Both Mukhina, cited above, and Chuprikova represent a minority of Russian psychologists still oriented to the natural science methodology, which in post-Soviet Russia has lost not only its dominant position, but also popularity. In contemporary Russian psychological discourse, the name of Pavlov is rarely mentioned along with the name of Vygotsky, and interpretations of cultural-historical theory mainly dwell upon a purely humanitarian tradition in psychology in connection with other humanitarian disciplines (culturology, philosophical anthropology, etc.). Russian cultural psychology today limits its subject area to personality, leaving aside the context of mental processes and states, studied by general and experimental psychology:

It should be emphasized that the cultural-analytical approach to the study of the evolution of psychological knowledge primarily addresses humanitarian issues shared by psychology and related sciences. These limit the scope of our research field, which does not include positivist and experimental discourses in psychological science. (Gusel'tseva, 2015 c.4).

In the Russian cultural - psychological discourse, the dominant trend aims towards a "general humanitarian synthesis", with a focus on the intersection of the humanitarian subject area of psychology with the humanities. This significantly impoverishes the possibilities and prospects for the development of cultural psychology as we can see it developing internationally. The latter is progressively emerging as a transdisciplinary discipline incorporating not only the humanities, but the entire scientific sphere, including the exact and natural sciences, along with humanitarian, and directing "centripetally" towards the integrative center of psychological science itself in the variety of its manifestations, towards general psychology.

Contemporary Russian psychological discourse focuses on personality, its subjective experience and consciousness. However, personality in the aspect of psychology, is embodied by mental processes and states, it is on this path that psychology can contribute to the understanding and study of personality - as a general and transdisciplinary problem. Personality detached from mental processes and states can hardly be regarded as a subject for psychological research. What then can psychologists offer as their contribution to interdisciplinary studies, apart from the "literature" which Vygotsky proposed to "put out of the brackets" of psychology? The expansion of the field of psychology into the sphere of complex, holistic, culturally determined phenomena is a today's demand. This is a challenge that psychology has to meet. However, if the expansion on the field of the neighboring humanities is accomplished at the cost of losing one's own roots, won't this be a Pyrrhic victory?

In contemporary Russian psychology there are practically no claims for integrating natural science and humanitarian psychology, which Pavlov dreamed of. Should we be surprised at the low popularity of Pavlov, who asserted as a real possibility, a goal to achieve and a prospect for development of psychology merging the objective and the subjective psychological research?

Concluding his speech at the presentation of the Nobel Prize, Pavlov said:

In essence, we are only interested in one thing in life - our mental content. Its mechanism, however, was and is still shrouded in deep darkness for us. All human resources: art, religion, literature, philosophy and historical sciences have all come together to shed light on this darkness. However, human has one more powerful resource at his disposal - natural science with its strictly objective methods. This science, as we all know, makes giant strides every day (Nobel Speech, p.114).

In his "Thirty Years of Objective Study of the Higher Nervous Activity of Behavior", Pavlov concludes his presentation of his research program with the thesis, according to which the objective data obtained thanks to this program

science will sooner or later transfer to assess our subjectivity, and thus will immediately and vividly illuminate our nature, so mysterious, explicate the mechanism and the vital meaning of the matter which occupies human more and more - his consciousness, the torment of his consciousness (Pavlov, 1951, v.3 (1), p. 139).

Such aspirations are not popular in modern Russian discourse, which determines the modest place, which Pavlov's work occupies there. It seems obvious that Pavlov sincerely believed in the possibility of the "fusion" of the objective and the subjective investigation, and was aiming to the solution of this ultimate task of his scientific research. However, he did not consider the solutions that he had found sufficient.

The analysis of Pavlov's scientific quest and aspirations, presented in the works of Daniel Todes, who, according to his own testimony, devoted 20 years of his life to this topic, is especially deep and profound. (Todes, 1998, 2014, 2018). He notes:

Pavlov was a sincere and passionate seeker of truth, and, despite his well-known self-confidence in public discussions, alone with himself; he was a thinking and doubting scientist. He understood very well the complexity of the problem of his quest (Todes, 2018, P. 31).

Complexity could not easily be overcome by adding more evidence:

This is the might, the paradox and the pathos of Pavlov's quest: he always believed that more experimental dogs, more trials and more data would eventually help to identify the missing links and make his data correct. Instead, they only complicated the problem, burying his every attempt at systematizing them under an avalanche of new results" (ibid, P. 31).

"Considering a dog as a simplification of human personality, he constantly interpreted laboratory animals on the basis of his life experience (including subjective experience) of people he knew and himself. In addition, vice versa - he analyzed himself, his acquaintances, the Russian revolution and the policy of the Bolsheviks basing on experiments with dogs." (ibid, P. 30).

Science involves facing ever new frontiers:

Pavlov and his colleagues achieved a lot in the process of his thirty years quest: facts, methodologies, insights, but the ultimate goal - to limit psyche within the framework of precise and distinct laws – was ever hiding behind the horizon due to new perplexing complexities.

For this reason, it was very difficult for him to complete his summarizing monograph. When he had to publish it in 1927, he concluded it not with a statement

of a triumph, but with the following confession: "Now we are surrounded, no, we are crushed - by a mass of facts that require explanation" (ibid, P. 31).

Todes' works on Pavlov are presented in Russian psychological discourse, but this he is not a member of the Russian professional community. In the Russian professional community a simplified image of Pavlov dominates, the foundations of which were purposefully created by Stalin's ideology, in the light of which Pavlov was turned into a symbol of Soviet science, devoid of both the doubts and the depth of understanding of the problem that he strived to solve.

One cannot but agree with the conclusion of Russian historian of psychology Sergei Bogdanchikov, when he, analyzing the materials of the Pavlov's Wednesdays, notes that "the issue " Place, role and significance of I.P. Pavlov in the history of Russian psychology" (Russian pre-revolutionary and - for us in particular - post-revolutionary, Soviet), upon closer examination, turns out to be poorly studied" (Bogdanchikov, 2017, p. 35).

Ideological and political issues undoubtedly played an essential role associated with the complex and ambiguous history of Pavlov's relations with Bolshevism:

Soviet historiography ... retold a simple and revealing story about a great scientist who, true to his ideas about objectivity, finally overcame prejudices in recognizing the success of the Soviet experiment... Pavlov's passionate criticism of the Bolshevik policy in 1920-1934. became the core of the new version of the parable of the scientist, consonant with the democratic aspirations of the Russian intelligentsia during perestroika. The triumphant conclusion of the discarded Soviet option - Pavlov's support for the Bolshevik policy on the eve of his death - turned into a mysterious and somewhat confusing episode» (Todes, 1998, P.26).

Notably, Todes points out that while working in Russian archives in the process of preparing his monograph about Pavlov, he repeatedly came across materials made by Russian researchers whose works about Pavlov were not published, in particular: «N.M. Gureeva and V.L.Merkulov made extensive use of archival materials hidden from the eyes of the Soviet public in the second volume "Chronicle of the life and work of Academician I.P. Pavlov", which covered in detail the life of Pavlov after the October Revolution. This beautiful tome has remained unpublished; the manuscript is currently in the materials of the personal archive of Merkulov... This article uses interviews with friends and colleagues of I.P. Pavlov, recorded on a tape recorder in the 1960s-1980s. by Yu. A. Vinogradov. Since the memories revealed by Vinogradov did not fit into the official historiography, these interviews were also not subject to publication... The writer Boris Volodin also collected and studied a large number of materials about Pavlov and the Bolsheviks, but was able to publish research essays only about Pavlov's life before the October Revolution..» (Todes, 1998, P.26).

On June 11, 2000, during the solemn ceremony of announcing the results of the I National Competition "Golden Psyche" - "Professional Results of the Century", Boris Dmitrievich Karvasarsky, a famous Russian scientist, psychiatrist, psychotherapist, noted:

The attitude of scientists of different generations to Ivan Petrovich Pavlov is a very complicated issue. Undoubtedly an outstanding scientist, whose name should never

be forgotten. He was overly ideologized by his disciples and then, in fact, consigned to oblivion during the "thaw" in the 60s and 70s, because with Pavlov things were associated, which he did not do, persecution and tendencies towards the destruction of psychology as a science were associated. <...> I witnessed the oblivion of Ivan Petrovich Pavlov and now returning to him seemed very fair to me.⁹³

Our attempt to outline the image of Pavlov in Russian psychological discourse is not so much an answer to the question of what this image is, but rather an evidence of the absence of an unambiguous answer.

Pavlov in the "E-library" of Russia

To provide the reader with some statistics on Pavlov's representation in contemporary discourse, we analyzed publications in the eLIBRARY.RU, the largest academic electronic library in Russia. The total number of publications affiliated with Psychology mentioning "Pavlov" in the "E-library", after we have excluded homonymic and those, which got into the list because of the mention of academic institutions bearing the name of Pavlov (for example, Pavlov St. Petersburg State Medical University, Pavlov Institute of Physiology, Russian Academy of Sciences, etc.) - is 130. Of these, the number of articles in academic journals is 77, of which 11 are indexed by the Web of Science or Scopus. The number of articles in journals included in the Russian S Citation Index core is 29.

Having analyzed the publications in which Pavlov's name is mentioned in one way or another, we divided them into the following groups:

1. Papers concerning his life and biography;
2. Those mentioning Pavlov's works in the review of the state of art on the problem, which the article focus on;
3. Marking Pavlov's influence on the development of certain ideas and / or researchers;
4. Grounding on Pavlov's ideas in planning research and experiments.
5. Publications of the works of Pavlov;

Pavlov's life and biography

In our selection of publications there are several works devoted to the study of biographical information, some facts from the scientist's personal life, as well as an analysis of his personal qualities. One of the most extensive works is the monograph "Petersburg of Ivan Pavlov", describing places, where Pavlov lived or in one way or another connected with Pavlov (Vovenko, Gromova, Kosmachevskaya, 2013), As well as a work dedicated to the

⁹³ <https://psy.su/psyche/projects/1795/>

museum of I.P. Pavlov in St.Petersburg, located in the flat where Pavlov lived (Gromova, 2015). There is also a number of articles devoted to the analysis of Pavlov's personality and his social influence and significance: for example, in the work "Dialogue with Pavlov took place!" (Reshetnikova, 2009), describing a traditional conference in honor of Pavlov in Ryazan, where Ivan Petrovich was born and spent his early years, which takes place annually in the Memorial Museum-estate of academician I. P. Pavlov.

One of the works is devoted to the study of moral and ideological premises that can be extracted from scientific works and personal notes of Pavlov (Ione, 2013), and in the article "G.I. Chelpanov, I.P. Pavlov and V.M. Bekhterev as Scientific Supervisors: Comparative Analysis" Rakitina O.V. gives the following description: "I.P. Pavlov, on the one hand, was an extremely demanding supervisor, on the other hand, he supported his students in every possible way. " (Rakitina, 2016, P. 280)

The topic of Pavlov's relationship with the Soviet government does not lose its actuality (Todes, 1998, 2014). Pavlov very negatively reacted to the October Revolution. In 1923, Pavlov told his students that thanks to Bolshevism, "Russian science is dying and will probably perish" (Todes, 2014, p. 474). For the Bolsheviks, Pavlov was a political reactionary, but an internationally recognized figure with connections and propaganda value and a brilliant scholar whose research supported their own materialistic worldview. Todes notes that "Literally giving carte blanche to his laboratories and enduring his constant criticism, they sent party leader Nikolai Bukharin to him with the instruction to 'get closer' to the scientist, created a network of informers around him and put pressure on Pavlov's associates, close friends and family.

In the twenties, Pavlov was a rare public critic of the Bolshevik regime as dogmatic, incompetent, repressive and deeply criminal. In the thirties, his attitude towards Soviet power became more complex. Pavlov continued to attack the "ruthless in cruelty and violence" regime, dogmatism, blind admiration for Stalin and the persecution of religion... On the other hand, by 1935, Pavlov recognized that the Bolsheviks, along with crimes and failures, had made "truly enormous positive achievements", including their steps towards eliminating the "wild chasm between rich and poor" and, most importantly, the unprecedented support and prestige of science in Soviet society.» (Todes, 1998, P.33-34).

Pavlov was a patriot of Russia. In a public lecture in 1923 he said: "I was, is and will remain a Russian man, a son of my Motherland, I am primarily interested in its life, I live in its interests, I strengthen my dignity by its dignity" (Todes, 1998, P.39). One can often hear that Russian patriots - reformers usually live abroad, and abroad they publish their critics, and from there they advise on reforming the country. Russian patriots -revolutionaries remain in their homeland, where they perish defending their ideas. Pavlov remained in Russia, openly criticizing the Russian authorities of his time and Russian culture in general, rejecting the offer to move to Sweden, where he was promised to have all the best opportunities and conditions for scientific work. Probably, we cannot call him a revolutionary, since he was engaged only in his scientific work, but, living in Russia, he openly showed disagreement with the authorities. He openly attended church in the country of "victorious atheism", he fought for the release of the employees of his laboratory when they became victims of Stalin's repressions. For example, his colleague Denisov, who was engaged in research on chimpanzee behavior, was accused, as many others, in the course of the repressions in the mid-thirties. The KGB arrested him three times, but the first two times Ivan Pavlov saved him by his personal intercession. After Pavlov's death, in 1937, Denisov was executed. There is an opinion that Pavlov did not die a natural death, since at late 1930es dead he was more beneficial for the authorities than alive.

Pavlov's work in the context of the analysis of the state of the art in academic publications

This category includes articles that mention Pavlov's name, mainly in the context of a review of his ideas as part of a discussion of a broader problem. So, in the article "Secrets of the Human Brain" Pavlov's ideas are mentioned once, and a very small passage is devoted to him:

I.P. Pavlov created his theory of conditional reflexes, according to which the horizontal cortical temporal connection during the formation of conditioned reflexes is based on the properties of nerve centers - irradiation, dominant excitation of the centers of unconditioned stimuli and blazing the path "(Zhumakova et al, 2017. P. 231) .

Pavlov is mentioned in the article by Irina Sirotkina, in concern to the polemics with Pavlov of Nikolai Bernstein (Sirotkina, 2016). The review article "Definition of the learning process (types of motivation and theory)" (Burlakova & Gubanova, 2019). Pavlov is mentioned as a certain basis necessary for the historical analysis of the phenomenon discussed in the article: "B. F. Skinner's operant conditioning is totally different from Pavlov's classical conditioning" (Burlakova, Gubanova, 2019; p. 31). In general, the influence of Pavlov's ideas on the formation of such a direction as behaviorism is also discussed in the article by Khanov A.A. and others (Khanov, Mysyakin, Kravchenko, Nedorezkov, 2016) and in article by Malina T.I. (Malina, 2013).

Thus, we can conclude that today mentioning ideas of I.P. Pavlov is part of the "canon" of a historical review of various kinds of problems, ranging from physiology and problems of the brain, ending with purely psychological problems; moreover, Pavlov is not just a fundamental figure for covering a particular topic; both at one time and today, it is a kind of "starting point", a reference point from which many scientists built their theories (even if this alignment was based on criticism of the initial provisions of Pavlov's theory - as in the case of Bernstein, already mentioned above).

Mention of Pavlov's influence on certain ideas or specific researchers

The publications that will be mentioned in this category, in contrast to the previous one, differ in their evaluative component when they mention Pavlov's activities. So, in the article by Natalja Chuprikova "Unknown Vygotsky: cultural-historical theory in the context of Pavlov's theory of higher nervous activity and the differential theory of development of H. Verner" ideas from Pavlov to Vygotsky: «None of the scholars, whose works and views were considered by Vygotsky in this study, was valued as highly as Pavlov. And it was at the time when no official cult of I.P. Pavlov existed at all. I think here is something to reflect upon for contemporary theorists, methodologists and historians of psychology. However, the issue is not only the highest evaluation of I.P. Pavlov as a theorist and a methodologist in the study of higher nervous activity and behaviour. L.S. Vygotsky developed his cultural-historical theory of development of higher mental functions under the direct influence of the theory of conditioned reflex of I.P. Pavlov and his fundamental ideas about the qualitative difference between human higher nervous activity and behavior and those of animals due to the

presence of the second signal system of a human, "grand signalistic potential of speech". According to Pavlov, it was word that made us human beings, and Vygotsky's cultural-historical theory of development of higher mental functions is about the same thing. In my opinion, the creation of the theory of L.S. Vygotsky, Hegel, Marx, Potebnya and Janet was directly influenced by I.P. Pavlov» (Chuprikova, 2016, P. 240).

In some articles, Pavlov's influence on the sphere of pedagogy is also noted; it is pointed out that when studying Pavlov's legacy, one should not forget about this area, reducing Pavlov's developments exclusively to the field of psychology: "I.P. Pavlov belongs to the gallery of the most famous people not only in Russia, but also in the world. Physician, naturalist, the first Russian Nobel laureate. According to his life purpose, he was destined to become not only a great physiologist, but also a teacher who determined the strategic direction of the development of a wide range of problems related to human development, education and upbringing.

Objective assessment of the legacy of I.P. Pavlov from the standpoint of modern pedagogical knowledge will reveal his ideas that contributed to the development of domestic pedagogy and psychology, which have retained and retain their significance at the present time. Historical and pedagogical discourse determines that in the development of the concepts of the formation and development of the personality, including the child, a special role belonged to the joint work of doctors and physiologists, who in their studies came up with results close to the data of psychology, which, in turn, strengthens the methodological basis of pedagogy ... Therefore, it is legitimate to talk about the significant influence of natural science ideas on the development of the theoretical foundations of not only psychology, but also pedagogy. At the beginning of the twentieth century, the most famous scientific schools actively cooperating with teachers and psychologists were the collectives headed by I.P. Pavlov and V.M. Bekhterev. I.P. Pavlov created the largest international scientific school, became the "patriarch of all the physiologists of the world" He also studied the orienting reflex, reflexes of goal, freedom, dynamics of nervous processes (inhibition, concentration). I.P. Pavlov developed the doctrine of temperaments and dynamic stereotypes. The results of his research had a significant impact on the development of medicine, psychology, pedagogy and other human sciences " (Romanov, 2018, p. 294). "At the beginning of the XXI century, the legacy of I.P. Pavlov provides a whole range of problems of personality development that have axiological meaning for modern pedagogy. First of all, it concerns understanding the mechanisms of parallelism of mental and physical development of children, the main stages of their harmonious upbringing. Problems of child development are developed on the basis of the doctrine of the functions of the brain, that is, one way or another, continuing to develop the ideas of I.P. Pavlova. Promising areas developing in our designated area are psychological pedagogy, neuropsychology and neuropedagogy "(Romanov, 2018, p. 295).

As you can see from the above quotes, Pavlov is often mentioned along with another great Russian scientist - V.M. Bekhterev. In this respect, an article by the Russian historian of psychology V.A. Mazilov, in which the research of V.M. Bekhterev is discussed, aimed at an objective study of human personality and in which the discussions between V. Bekhterev and I. Pavlov about the priority in the study of conditioned reflexes are analyzed. The article also provides the provisions of the concept of fact and argues that from the standpoint of the concept of fact, the priority of Bekhterev relative to an objective study of personality is undeniable (Mazilov, 2015). Pavlov's developments in the field of individual personality differences are also discussed in the context of their comparison with V. Ostwald's typology in the article by E.A. Golubeva. (according to the Google Scholar database, this article is cited 20 times), where, among other things, the author draws a conclusion about the emerging tendencies towards convergence of typological and measuring approaches to the study of

differences between people, which suggests that developments in the field of both approaches are at least partially relevant today (Golubeva, 1994; 1995).

In 2019, in connection with the anniversary dates, there is an increase in interest in the personality and activities of Pavlov, in connection with this, several review articles are published in which, along with a biographical note typical for this kind of work, the role of the scientist is also mentioned, his influence on modern science.

However, the nature of such influence is often limited to very general phrases: "Research by I.P. Pavlov, the physiology of GNI had a huge impact both on medicine and physiology, and on psychology and pedagogy" (Kiryushin, Kozeevskaya, 2019, p. 640). And in the article "Ryazan genius of Russia (to the 170th anniversary of the birth of Academician I.P. Pavlov and the 115th anniversary of the Nobel Prize)" (Zagrina, 2019) the authors reflect the main directions of Pavlov's activities and "emphasize the idea of the relevance of the results of his research for modern medicine in the field of physiology blood circulation, digestion and higher nervous activity" (Zagrina, 2019, p. 413). However, our further analysis showed that the direct, direct use of I.P. Pavlova in Russian science is minimal.

So, during this period, many works were published, one way or another mentioning Pavlov's colossal influence on a variety of areas, from physiology to psychology and pedagogy, but later we will see that modern researchers turn directly to his ideas not so often and in very limited topics. ...

Direct use of Pavlov's ideas in research

One of the most popular areas developed by Pavlov and most often mentioned in the works of psychologists (with links directly to Pavlov) is the problem of temperament. So, the methodological basis of the research of Raufov S.S. and Shilov S.N. "Features of the traits and structures of temperament of young people of different cultures (Raufov, Shilov, 2019) are the views of I.P. Pavlov, B.M. Teplov, V.M. Rusalov on the biological conditionality of the formal-dynamic properties of individual human behavior. A theoretical article by Aminov, Osadcheva and others clarifies the concept of temperament, adjusted for the current state of research on this issue, and the concept of Pavlov's temperament is taken as a basis (Aminov, Osadcheva, Blokhin, 2019). In the context of the problem of temperament and the use of Pavlov's ideas in that area, an unusual approach deserves attention, which was used in the article by A.K. Drozdovsky: on the basis of experimental research, an attempt was made to combine two historically non-intersecting scientific directions in the study of human natural features in a single coordinate system: I.P. Pavlova on the properties of the nervous system, types of higher nervous activity and the theory of psychological types by K.G. Cabin boy; it is noted that Pavlov's doctrine developed in Russia within the framework of the scientific direction - differential psychophysiology, Jung's theory - in the works of famous American researchers I. Myers and D. Keirse; The author proposes a spatial model that allows, based on knowledge about the properties of the human nervous system, to predict his temperament and psychological type in a wide age range (Drozdovskiy, 2014). The concepts of temperament and the problem of will also receive theoretical understanding in the works of A.V. Reva, A.R. Batyrshina. (Reva, 2014; Batyrshina, 2013; 2015).

In the article "Research of personality traits using the "personality questionnaire" by G. Eysenck. A brief historical analysis of the qualities of the students' nervous system" (Ryutina L.N. and others, Colloquium-journal. 2019. No. 24-5 (48). Pp. 21-24) described the

allocated by the Soviet scientist I.P. Pavlov, the distinctive features of the properties of the nervous system, depending on the type of the nervous system (choleric, sanguine, phlegmatic, melancholic), and on the basis of these ideas, a study of personal characteristics was carried out. The article "Nonlinearity 10 of the transformation of stimulus intensity into sensation and its mathematical expression, embedded at the receptor level, and its mathematical expression" (Fokin S.I. Bulletin of psychophysiology. 2019. No. 3. P. 10-22) uses the concept of "weak" and "strong" »The nervous system (which is also included in the structure of the concept of temperaments created by him). And the research is based on A.S. Myakishev "The tendency to the formation of neurosis in different types of temperament among students" (Myakishev, 2019) was based on the teaching of I.P. Pavlov on the types of higher nervous activity with a certain ratio of the first and second signaling systems, cortex and subcortex, establishing a connection with clinical forms of neuroses. Fundamental developments in the field of higher nervous activity and reflex theory are mentioned in the article by I.A. Alekhin and D.S. Razuvaev "Implementation of ideas and. M. Sechenov and I. P. Pavlova in the content of the exercise method "(Alekhin, Razuvaev, 2019):" in the article the exercise method is considered from the side of the interaction of pedagogy, psychology and physiology. The article reveals the influence on the cadet's system of higher nervous activity by means of the exercise method used in the upbringing of military personnel. The importance of psychological processes in the formation of reflexes has been substantiated" (Alekhin, Razuvaev, p. 86).

There is an interesting look at the ideas of Pavlov in the article by P. and O Kukso the authors write that Pavlov can be considered the founder of the systems approach, since in his research, understanding the organism as a system and the principle of consistency in the work of the brain becomes integral to explaining the factual data. He correlated mental phenomena with physiological processes and understood the entire neuropsychic organization as a single complex system (Kukso and Kukso, 2009).

Pavlov's ideas are also used in their original form: for example, in three experiments conducted in 2016, in which the participants were shown films interrupted by commercials with humorous advertisements, two categories of predictions arising from the theory of I.P. Pavlov : relating to the specific conditions for the occurrence of the effect of interaction between repetitions and the order of the conditioned and unconditioned stimulus and concerning the consequences of violation of the dynamic stereotype (Rebzuev, Khudyakova, 2016). In the work of Dyachkova and Dyachkov, the theory of the types of higher nervous activity is also the foundation of the study and is taken without changes: their work examines the typology of the linguistic personality of representatives of different specially human types of higher nervous activity according to the theory of I.P. Pavlova: "thinkers" and "artists" (Dyachkova, Dyachkov, 2018).

On the one hand, this may indicate that the figure of I.P. Pavlov in the eyes of modern researchers is perceived as something historically significant (as evidenced by the large number of articles that one way or another note the scientist's contribution to the development of many areas of knowledge) and to some extent "canonical", and his ideas - as a turning point and revolutionary for his time is a breakthrough in many areas, however, from the point of view of their use as a basis for solving modern research problems, there is no great need to turn to his ideas. This is also confirmed in our survey, the results of which will be highlighted by us below: the overwhelming majority of psychologists recognize Pavlov's enormous contribution to science as such, in particular to physiology and psychology, but few people know anything about him besides his theory of reflexes and not even everyone knows why Pavlov will receive the Nobel Prize. On the other hand, the fact that Pavlov's ideas are not so widely applied directly in research may indicate that they have simply been modified either into something more specific, or the boundaries of their sphere of influence have become more blurred. So,

now, for example, it is difficult to separate the "Pavlov's theory" itself (in any sphere) from some other more specific version of it (for example, if the study is carried out in a behavioristic approach, the authors are unlikely to associate their methodology with the original Pavlov's ideas about reflexes, since in modern science they have not been preserved in their original form, but have undergone some evolution). In support of this thesis - in particular, regarding the field of physiology - Latanov writes that "Over the past half century, the science of higher nervous activity in terms of the breadth of scientific tasks has gone far beyond the basic concepts of I.P. Pavlov and his outstanding domestic and foreign followers "(Latanov, 2018, p. 397).

Thus, we can say that Pavlov's ideas are present in many studies (even if the researcher himself does not know about it, he implicitly refers to Pavlov), but at the same time, in an explicit, explicit form, researchers use Pavlov's ideas and his citation in modern psychological science is very limited.

Having analyzed the subject matter of the articles, it can be noted that the contribution of I.P. Pavlov to modern psychology or the mention of his ideas in the historical survey of some research problem are presented in articles of modern psychologists still more, rather than directly applying its ideas and methods in practice. In part, this attitude towards the figure of Pavlov will be reflected in the results of our September 2020 psychological survey.

Publications of the works by Pavlov:

This category includes two monographic editions, anthologies of classic works:

- "Brain and psyche" In *Selected psychological works* IP Pavlov; ed. M. G. Yaroshevsky; Russian acad. Education, Moscow Psychological and Social Institute. Moscow, 2008. Ser. Psychologists of Russia (3rd ed.);
- "Physiology. Selected Works " Moscow, 2018. Ser. 22 Anthology of Thought (2nd ed.).

There are also several journal publications of the texts of public lectures, which Pavlov given by Pavlov in Petrograd in April - May 1918: "About the mind in general, about the Russian mind in particular", published in 2009 in the Bulletin of Practical Psychology of Education and in 2014- 2015 in the journal "Personality development". The latter published also "The Nobel speech of physiologist Ivan Petrovich Pavlov (12 December 1904, Stockholm in 2014.

The publication of the texts of these lectures deserves attention, since their content hits a nerve of the contemporary reader; it addresses issues rather painful for the Russian intelligentsia, which even today cause either laughter or tears. In his lectures, Pavlov not only generally reflects on the nature of the mind, by which he means general intellectual ability, but also gives a very critical assessment of the Russian mind. This text express his sincere pain for the events taking place in Russia at that time and for the weaknesses inherent in the Russian people. Speaking about the Russian mind, which character impacts the fate of Russian state and society, Pavlov singles out three kinds of that: the mind of a scientist (here he names Mendeleev, the creator of the periodic system of chemical elements, as an example), the peasant's mind and the mind of Russian intelligentsia. Noting the high power of the mind of Russian scientists, Pavlov does not dwell long on its analysis. He notes, that these

minds are few, and unfortunately they have no impact on the life of the Russian state and society: "Therefore, it seems to me that I am doing right not taking into account the scientist's mind here. ... Then, what kind of mind am I going to assess? Obviously, the mass, common life mind, which determines the life and fate of the people. However, in the mass mind we have to single out two different types. These will be, firstly, the mind of the lower masses, the "peasant mind", and then - the mind of the intelligentsia " (Pavlov. 2015, p. 222).

Pavlov characterizes the "peasant mind" of Russia as follows: "Where do we see its manifestations? Is it the everlasting three fields farming⁹⁴, or the fact that the red rooster is perpetually roaming villages in summer⁹⁵, or the muddle of volost⁹⁶ gatherings? The same ignorance remains that was hundreds of years ago ... Is such a mind worth talking about, can it in any way be responsible for the fate of the country?" (Pavlov. 2015, p. 223). This is followed by a short conclusion: "...thus, to assess the common life mind, which determines the fate of the people, we have to leave aside the mind of the lower masses" (Pavlov. 2015, p. 222-223).

Hence, Pavlov's lecture on the Russian mind focused on the mind of the "intelligentsia":

"... what is worth talking about it and characterizing it, what really matters, determining future of the nation – that is, of course, the mind of the "intelligentsia".

Its characteristics are of interest, its features are important. It seems to me that what has happened recently in Russia is undoubtedly a matter of the intelligentsia mind impact, while the masses have played a completely passive role, they have just followed the path, which intelligentsia led for them" (Pavlov. 2015, p. 223).

Taking into account that Pavlov's assessment of the social revolution of 1917 in Russia was extremely negative, one can assume that his assessment of the Russian "intelligentsia" mind is also very critical. Pavlov consistently compares its features with the basic general characteristics of the mind, which were the subject of his first lecture, and for each characteristic he gives the Russian mind a negative assessment.

The first basic general property of a powerful mind noted by Pavlov is an ability for extraordinary concentration of thought. Pavlov notes on this point in relation to the Russian mind: "We are not inclined towards concentration, we do not love it, and we even have a negative attitude towards it ... our disputes ... are characterized by extreme vagueness, very soon we move away from the main topic" ((Pavlov. 2015, 224). Further: "... everyone wants to talk, talk to no avail, without thinking carefully about the topic, without realizing whether this complicates the solution of the issue or accelerates it. There are endless remarks that take more time than the main subject, and our conversations grow like a snowball "((Pavlov. 2015, 225). "...features that we appreciate are not concentration, but onslaught, speed, attack. Obviously, these are what we consider to be a sign of talent; For us, diligence and perseverance do not fit well with the idea of a talent"((Pavlov. 2015, 225).

⁹⁴ A backward farming system

⁹⁵ an ideomatic expression about chain fires

⁹⁶ region

The second most important basic general property of the power of mind, which Pavlov singles out, is "the striving of thought to capture the reality" - that is, an aspiration for facts, the desire to know and understand the objective reality as it is. With numerous examples, Pavlov shows that

"the Russian mind is not inclined to facts. It loves words more and operates with those.... This is a verdict on Russian mind - it knows only words and does not want to know the reality... We are playing with words, not studying the real life "(Pavlov. 2015, 229).

From analysis of the features of the Russian mind, Pavlov proceeds to general conclusions: "I went over all the features that characterize a powerful mind. As you can see, the fact is that in relation to almost every feature we are on the disadvantageous side "(Pavlov. 2015, 236) ..." The picture of the Russian mind I have drawn is gloomy, and I realize this, I am bitterly aware of this. You can ask me, why I have delivered this lecture, what is the use of it. Am I enjoying the misery of the Russian people? No, there is a purport here. First, our self-respect requires facing the things as they are. Moreover,

.... the mind of animals and humans is an organ specially fit for development. It changes affected by life's situations, and organisms both of an individual and of a nation can develop. Therefore, though we have certain defects, those can be fixed. This is a scientific fact. Then, my characteristic of our people is not the last judgment. We may still have hopes, chances for future"(Pavlov. 2015, 237-238).

In the course of the lecture, Pavlov gives many examples from current and previous socio-political processes in Russia:

"Take our Slavophiles⁹⁷. What had Russia done for the development of the world culture at their time? What samples has it shown to the world? However, this people believed that Russia would "rub the eyes of the rotten West". Where does this pride and confidence come from? Do you think that life has changed our views? Not at all! Do we not now read in papers almost every day that we are the vanguard of humanity? Is not that proof, to what extent we are blind to reality, to what extent we live in fantasies? The mind is a cognitive ability, an adaptation to reality. If I do not see the reality, then how can I adapt to it? ... Take our Duma⁹⁸. Each time when it assembled, it was raising public resentment against the government.We all knew that the government was bad. However, uttering incendiary phrases, raising a storm of

⁹⁷ an intellectual movement originating from the 19th century that wanted Russia to develop upon values and institutions derived from its early history. Slavophiles opposed the influences of Western Europe in Russia

⁹⁸ a Russian assembly with advisory or legislative functions

indignation - they excite society. Did they want this? So, they had to face two things at once - the war and the revolution, which they could not withstand at the same time, and they perished. Is this an evidence of adequate comprehension of reality? " ((Pavlov. 2015, 236)

A survey on Pavlov

In addition to our analysis of publications, we conducted a small survey of psychologists. The survey was conducted via online form at the Professional Communities of Psychologists on Facebook, Vkontakte, and at B17.

Thirty persons between the ages of 29 and 70 participated in the expert survey, all of whom are involved in psychological science, research and/or psychological practice. 67.7% of the subjects are women, 32.3% are men. 90.3% of the respondents are psychologists, 64.5% are scientists. Of the respondents, 67.7 percent had bachelor degree or specialist degree, 25.8 percent had a master's degree and 3.2 percent had a degree.

The psychologists were asked several questions, which are presented below:

1. Imagine that a person who has never heard of Pavlov, asks you who it is. What would you answer him?
2. In your opinion, in which of the scientific areas did Pavlov make the most significant contribution? (Check no more than two)
3. What kind of development (work, experiment, idea) of Pavlov do you consider the most significant for the world science?
4. What is the significance of the works of I.P. Pavlova for psychological science?
5. In your opinion, which of the developments of Pavlov can be attributed to the field of psychology? If you find it difficult to answer, put a dash.
6. In your opinion, on which areas of psychology did Pavlov's works have the greatest influence? (Several can be noted)
7. In your opinion, on which areas of psychology did Pavlov's works have the greatest influence? (Several can be noted)
8. Do you think that any of the developments of Pavlov are relevant in modern psychological science? If so, which ones?
9. For what was Pavlov awarded the Nobel Prize? If you find it difficult to answer, put a dash.
10. Have you read any of the works of Pavlov?
11. Do you know any of Pavlov's published works? If so, please list them. If not, put a dash
12. What do you know about such an event as the "Pavlov's session"? What role did Pavlov play in this event?

The presence of this question in the questionnaire requires a little explanation. The "Pavlov's session" refers to a session held by the Academy of Sciences and the Academy of Medical

Sciences of the USSR in 1950, which remained in the Russian history of science as one of the examples of the state's struggle against the influence of Western trends on physiology and psychiatry. Pavlov had nothing to do with this session, since he died long before this event. The question in the questionnaire serves as a verification question.

13. Enter your age

14. Enter your gender

15. Your education:

16. Do you practice psychological practice (counseling, mentoring, and other forms of practice)?

17. Are you engaged in scientific activities?

18. Indicate in which university you received your psychological education? If there were several of them, indicate all.

When asked how the interviewees would have presented Pavlov to those who did not know about it, the answers distributed as follows:

Physiologist – 18; Outstanding person – 16; Scientist – 12; Russian – 4; Nobel laureate – 4. Other definitions occurred 3 times or less (Physician, Researcher, Psychologist, Famous scientist, Creator, Biologist and other).

100% of respondents believe that Pavlov made the most significant contribution to physiology; 55.3% added that it was the same in psychology. 42.1% added medicine to physiology and only 2.6% chose pedagogy.

Among the answers to the question of what is the significance of Pavlov's works for psychological science, there are more often answers about the conditioned reflex and the theory of higher nervous function: "Understanding unconscious behavior based on conditioned reflexes", "the first and second signaling systems", "The connection of behavior with the laws of activity of the nervous system", "Without knowledge of reflex activity, it is unrealistic to understand the work of the nervous system and psyche", "Higher nervous activity, the basis for psychology. A conditioned reflex, described a scheme that allows us to recognize our nature, and better understand the mechanisms of natural interaction "and etc.), however, there are also negative assessments of the scientist's contribution ("retardation in the development of psychology", "This is anti-significance - it took psychological thought away from the soul into the illusion of materialism").

The answers to the question of which of the areas of psychology Pavlov's works had the greatest influence were distributed as follows: 35 participants (which is the overwhelming majority of respondents) believe that Pavlov contributed to behaviorism, 23 participants to neuropsychology, 16 to cognitive psychology. Hypnotherapy, psychoanalysis, and gestalt psychology were all noted once. This distribution of answers looks logical, since the behaviorist direction really grew based largely on the foundation of Pavlov's ideas.

Answers to the question of which of the areas of psychology Pavlov's ideas influenced were distributed as follows: most often the respondent noted the clinical and experimental psychology (81% and 63%, respectively); 42% of the participants noted educational psychology. Fewer participants said that Pavlov had an impact on social psychology (21% - 8 participants), and organizational, behavioral, general psychology and animal psychology were noted only once. This seems rather contradictory if we turn to the previous question: in it, the majority of respondents noted the influence of Pavlov's ideas on behaviorism, and in this

question, the influence on behavioral psychology was noted only once. Perhaps this is due to the fact that Pavlov's developments are nevertheless associated more with their medicine, physiology, and since in this issue an option was presented that was close to these areas - clinical psychology - the respondents focused on it.

To the question "Do you think that some of the developments of Pavlov are relevant in modern psychological science?" only one respondent answered "no"; another respondent replied "I think they are not relevant, or rather anti-actual - harmful". The rest cited as an example, mainly, developments related to the theory of reflexes, the theory of higher nervous activity, the theory of temperaments. Also, one respondent noted that Pavlov's ideas "... are relevant as a basis for new developments, perhaps."

14 people out of 38 could not answer the question of why Pavlov was awarded the Nobel Prize. All other respondents one way or another answered "for achievements in the field of physiology and digestion."

Almost half of the respondents answered that they had read Pavlov's works, however, only five respondents indicated specific names (the rest answered that they did not remember the exact names or indicated the sphere: for example, "there are many of them, but I don't remember the names", "conditioned reflex (selectively)") ... In general, when asked whether the participants had read any of Pavlov's works, 48% of the respondents answered that they did not remember, 31% - yes, they did and 21% - no.

When asked, "What do you know about such an event as the "Pavlov session" ? What role did Pavlov play in this event?" the following answers were received: "Defeat, primitivization of psychology. Pavlov had already died by that time, his disciples were furious ", "It seems that it was something like a trial for those who deviated from the "party line" (from physiology). I believe that Pavlov himself would not approve of this ", "These were joint meetings of academies to combat bourgeois influence on Soviet science. Mid 20th century. Well, or something like this, sort of, in my opinion", "A meeting of scientists, at which Soviet academicians spoke with criticism of Pavlov's followers who deviated from his ideas / views, etc. As a result, physiology, psychology and related sciences suspended the development ", "Stalin's attempt at another "purge" in science - the desire to replace, reduce psychology to the format of physiology, 1950 ". About a third of the respondents answered that they do not know what they are talking about; one respondent replied that Pavlov was the organizer of this event; five respondents noted that Pavlov had already died by that time, so he could not have anything to do with this Session.

According to the results of the survey, we can say that the figure of Pavlov is very significant for Russian psychologists; in their minds he is associated with someone great, one of the famous Russian scientists who contributed to world science. At the same time, as is often the case with people who at the social level are recognized as great, significant and whose image is already fixed in the collective consciousness as something that does not cause controversy, Pavlov and his real activities are presented as something blurred; many psychologists cannot say what the specific contribution of Pavlov as a scientist was, what his main works are called, but at the same time everyone recognizes his enormous influence on many scientific areas from physiology to pedagogy.

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