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## Test as a Method of Psychology. Development History and Basic Requirements

### Annotation

*Main problem:* The article highlights the problem of tests as methods of psychology, the influence of validity and reliability on the results of psychological research.

*Purpose:* Uncovering the significance of validity and reliability on psychological research results.

*Results and their significance:* Testing is an important method in psychology, allowing measuring various aspects of the psyche and behavior of a person. The history of the development of tests in psychology goes back more than a century and began with the work of Francis Galton and Alfred Binet. Over time, the tests have become widely used in various fields such as education, personnel selection, clinical diagnosis and research. Basic requirements for tests include reliability (repeatability of results), validity (measurement accuracy), standardization (same test conditions) and objectivity (lack of subjectivity in assessment). Tests must be designed using psychometric principles to ensure accuracy and validity of results. Modern tests include a variety of measurement techniques, such as tests of personality, intelligence, aptitude, and professional skills. The use of tests in psychology requires professional training to correctly interpret the results and make valid conclusions. Testing as a method of psychology continues to evolve, and its role remains key in the study of the human psyche and behavior. Testing in psychology has a wide range of applications, including assessing personality traits, identifying psychological disorders, and predicting behavior and success in various areas of life. The development of computer-based tests and online platforms makes testing more efficient and convenient for researchers and participants. Modern tests increasingly take into account cultural differences and the diversity of individual characteristics, which contributes to more accurate and tailored assessments. It is important to remember that the use of tests requires ethics, confidentiality and compliance to ensure the reliability and validity of the data obtained.

*Key words:* test, testology, methods of psychology, Ch. Spearman, validity, reliability.

### Introduction

In psychology, as in many other sciences, there are certain ways of obtaining scientific data and facts, called methods. In addition, one of these methods of psychology is tests. The word “method” itself comes from the Greek “method” - “path, way of implementing an activity.” Methods are divided into basic ones, such as experiment, observation and measurement method, as well as non-basic ones, the most common and well-known of which are tests, as well as interviews (conversations), questionnaires, cross-sections, longitudinal sections, comparative methods, biographical methods, methods of analysis of activity products, method of mathematical data processing, methods of understanding (according to E. Spranger).

The formation of the science of psychology is largely due to the use in practice of methods of natural and exact sciences. Until this point, psychological knowledge was gained mainly through introspection, speculative reasoning, and observation of the behavior of other people. Analysis and reasonable generalization of this kind of life facts have played a positive role in the history of psychology.

The most intensive development of psychological diagnostic methods was observed at the turn of the 19th and 20th centuries. however, at that time many methods were aimed at studying human intelligence and its basic characteristics. the direction in psychodiagnostics dealing with issues of human intelligence was later called mentimetry [1, p. 13].

The modern understanding of the term “test” as the most important diagnostic method arose at the end of the 19th century, and one of the authors of the first tests was the English researcher Francis Galton. He is not only the founder of the first test methods but also the founder of the scientific study of individual differences in differential psychology. The first presentation of the test method to the general public occurred in 1884 in London, at an international exhibition of medical equipment. The process of measuring abilities took place in an anthropometric laboratory, where any interested visitor could be tested on 17 indicators, which included: visual acuity, color difference, impact force, memory capacity, etc.

### **Materials and methods**

Our article is of a mischievous nature. In this regard, the main method when writing the article was the comparative method. We also used a continuous sampling method.

The American psychologist Cattell made a great contribution to the development of a completely new direction in psychology - psychodiagnostics; he took an active part in the creation of the first psychological tests. He also analyzed statistical data. Cattell believed that the validity of a study directly depends on the accuracy of the data obtained.

Cattell's very first intelligence test included 10 different subtests that measured: skin sensitivity, reaction time to light and sound, physical reaction speed, a dynamometer to measure grip strength, and other methods.

Cattell's research has been criticized in particular, mentor of the British psychologist, F. Galton. Galton argued that the test, first of all, must have validity, that is, it is necessary to conduct a comparative analysis of its results with the results of other psychologists and, based on this analysis, draw conclusions about whether it is possible to use this test in the course of psychological practice. the same time, according to the psychologist, it is necessary to take into account the results of testing the same variables that are studied using a particular test.

However, the process of widespread dissemination of tests began only in 1905, this is due to the publication of tests for diagnosing the intelligence of children of preschool and primary school age, and the authors of these tests are French psychologists A. Binet and A. Simon.

Let's take a closer look at the features of this famous test. As R.S. Nemov says in his “Psychological Dictionary”, this test is the first intelligence scale created in the world, intended for school-age children and developed by A. Binet and T. Simon in France in 1905. Binet-Simon's test is based on the assessment of human cognitive functions (attention, memory, imagination and thinking). It was aimed at testing the higher mental, cognitive abilities of a person, in contrast to simpler actions, sensory functions, reaction time, the ability to distinguish stimuli, etc., which is what the tests used previously, for example, by F. Galton, were aimed at.

Initially, A. Binet used in his experiments to study intelligence, the same tests that were used by Galton and J. Cattell. However, L.F. Burlachuk notes that: “Binet came to the conviction that to study individual differences in intelligence it is necessary to turn to more complex mental processes” [2, p. 19]. According to L.F. Burlachuk: “In 1905, A. Binet, together with Theodore Simon, created the first scale intended for measuring the intelligence of children and consisting of 30 tasks, arranged depending on increasing difficulty” [2, p. 21]. A. Binet also raised the problem of grouping test methods into different age groups.

As mentioned above, the subjects were given tasks that could be compared with their age, i.e. children aged 10 were given tasks that most children aged ten could handle, etc. But L.F. Burlachuk notes the following point: “He (the child - A.Z.) may not be able to cope with some tasks that in complexity correspond to a lower mental age than his own. In this regard, it is customary to establish the so-called “base age” of the subject, his maximum age level, below which all test tasks are available to the subject” [2, p. 22].

At the same time, L.F. Burlachuk says that during psychodiagnostics, it is important for a psychologist to take into account the age of the person being studied also because at a younger age, the development or lag of a child intellectually is much more significant than, for example, in adolescence. In this regard, indicators will vary for different age groups and have their own characteristics.

V.L. Stern proposed measuring intelligence as a relative rather than an absolute value, as was previously accepted. Thus, Stern laid the foundations for a concept that later became known as “intelligence quotient” (IQ). Stern's predecessor, the French psychologist A. Binet, also said that in the “measurement of the mind” it is worth adhering to relative rather than absolute scales [3, p. 23-24].

The next psychologist who made a significant contribution to the history of the development of psychodiagnostics, according to L.F. Burlachuk is Ch. Spearman. His research “was stimulated by his disagreement with the existing data that tests intended to measure different aspects of intelligence do not correlate with each other, and therefore there is no basis for calculating a general, summary indicator” [2, p. 24].

This theory of intelligence is considered by L.F. Burlachuk. According to him, “in this concept, positive correlations are explained only by the presence of a general factor; the stronger the saturation of tests with this factor, the higher the correlations between them. Specific factors play the same role as measurement errors” [2, p. 25].

Charles Spearman proposed selecting tests for psychodiagnostics, relying on the source material and the primary characteristics of the person being studied, and not on intuition. C. Spearman studied various aspects of human intelligence by testing the subject.

The crisis of psychodiagnostics in the early 30s of 20<sup>th</sup> century.

As noted by L.F. Burlachuk, in psychology, tests, although they have won universal recognition, for a long time remained outside the officially recognized diagnostic methods. Based on what was described by L.F. Burlachuk information, it can be suggested that the psychology of the period 1900-1920 did not take tests seriously, but only as something completely far to this science.

By the early 20s of the twentieth century, psychological testing was successful only in applied areas of various sciences, in which it had different names.

Mentimetry (from Latin mens – “mind” and Greec metres – “to measure”) is a direction in psychology and pedagogy, which is characterized by intensive attention to human intellectual characteristics. Psychological methods, that are frequently used in mentimetry, had a rapid development in the last decade of the 19<sup>th</sup> century and the first half of the 20<sup>th</sup> century.

Test as a psychodiagnostical method was first publicly presented in 1884 as an international exhibition of medical equipment.

Development of psychodiagnostics in the end of 30s of 20<sup>th</sup> century.

This period of the 20th century is characterized by the emergence of many new tests. At this time, in Great Britain, a well-known test for measuring the level of intelligence appeared, authored by L. Penrose and J. Raven, called “Raven's Progressive Matrices”. This test “minimized the influence of culture and training on the results obtained” [2, p. 41]. Raven's tasks are puzzles of a geometric nature with an increasing degree of difficulty (each task has a certain logical sequence that must be established for successful completion, while the complexity of the task increases gradually). The subject's task was to select the missing segment that completes the sequence outlined in the task. As we see, J. Raven and L. Penrose created their own test. The basis of which was the theory of the G-factor by Charles Spearman, which we mentioned earlier. But L.F. Burlachuk writes the following; “Raven's progressive matrices have not become highly effective for predicting learning success” [2, p. 42]. That is, as we see, this test could reveal the general level of intelligence of the student, but could not determine the success of the student's learning.

One of the psychologists who studied the decline in intelligence and created his own intelligence test is D. Wexler. Weskler defined intelligence as “the ability of an individual to behave purposefully, think intelligently and successfully interact with the external environment” [5, p. 166]. D. Weskler divided verbal and non-verbal intelligence, according to the areas of manifestation of this intelligence.

Development of psychodiagnostics in the 1940s.

This period is also characterized by an increase in the number of psychodiagnostic methods, one of which is the Minnesota Multifactor Personality Inventory (MMPI), which we would like to particularly focus on due to its great popularity among professionals. The MMPI was developed by psychologists Stark R. Hatatway and McKinley and was intended for the selection of officers of the American army. About the purpose of this test L.F. Burlachuk says that: “Although the MMPI was originally intended to help differentiate psychiatric diagnoses, its scales, based on 550 statements, are also beginning to be used in the diagnosis of non-pathological personalities” [2, p. 55].

The original version of the test consisted of 550 questions-statements written on cards. After viewing the card, the subject had to place it in one of three boxes - “true,” “false,” and “can't say.” This was followed by processing using scales.

The MMPI test consists of 10 main scales and 3 lie scales, and if the score on the lie scales is above the norm, then the results of the entire test are considered unreliable.

The first Russian-language version of the test was created in the USSR in 1971 at the Institute of Forensic Psychiatry, authored by L.N. Sobchik. In 1976, F.B. Berezin created a brochure abbreviated version of the test consisting of 377 questions. In the questions of the shortened version, there was an address to you, since here, as in the original version, both men and women were tested using a single questionnaire. In the 1980s, a version of the Mini-Cartoon test was created for teenagers and young men, consisting of 71 questions, where the 5th scale of female/male character traits was removed, as well as questions regarding satisfaction with sex life.

A great achievement in psychodiagnostics during this period was the creation of the “Color Choice Test” (1948) proposed by the Swiss psychologist Max Luther. This test belongs to the number of projective techniques.

The end of the 40s was also marked by the creation of a 16-factor personality test created by Raymond Bernard Cattell. And a few words should be said about the features of this test.

However, the institute created by R. Cattell in 1949 was not only engaged in the creation and development of new tests, but also developed a mathematical and statistical apparatus applicable in psychological testing. A large number of different researchers have written on this topic. Thanks to these studies of mathematical statistics, R. Cattell and his collaborators made an enormous contribution to the development of factor analysis.

The term “test” in psychological science comes from the Latin word “testa” (jug, shell) and is understood as a set of standardized tasks and questions aimed at studying certain human qualities. According to the psychological dictionary of V.D. Davydov: “A test is a short, standardized, usually time-limited psychological test designed to establish men-individual differences in the values being compared” [3, p. 370]. A similar definition of tests is given by K.M. Gurevich, “A standardized and usually short and time-limited psychophysiological test designed to establish, for practical purposes, interindividual differences in intelligence and ... special abilities” [3, p. 45]. That is, this method is linked here to the problems of differential psychology.

In his modern psychological dictionary A.L. Svetsinsky adheres to a slightly different understanding of tests: “A test is a set of standardized questions (or tasks) designed to measure the degree of expression of a person’s mental properties in relation to a particular field of activity” [4, p. 436].

A. Anastasi, in the first chapter of his book [4], entitled “The Nature and Purpose of Psychological Tests,” defines the concept of “psychological tests” and talks about the development of tests. The definition of tests according to A. Anastasi sounds like, “Psychological tests are tools or, using a broader term, tools” [15, p. 16]. On the topic of development and improvement of psychological tests, A. Anastasi writes that “Testing has developed and continues to develop at an increasing pace, providing effective assistance in solving an increasingly wide range of issues in various areas of everyday life” [5, p. 16].

Based on the research of M.S. Rogovin, we can say that tests differ from other methods of psychological research, “1) in the relative simplicity of the procedure and equipment; 2) short duration; 3) direct recording of results; 4) convenience of mathematical processing; 5) the presence of established standards (norms); 6) the possibility of use both individually and for entire groups” [5, p. 174].

Validity and reliability of tests. Tests are an accurate and quantitative method of psychodiagnostics aimed at studying individual personality traits and, accordingly, special requirements are applied to them, among which, first, we need to highlight the two most important ones: validity and reliability. Psychologist E.S. Romanova also writes that these requirements are basic: “In modern psychometry, it has become customary to highlight its reliability and validity as fundamental characteristics of the suitability of a test as a measuring instrument” [1, p. 68].

B.M. Teplov also adds the “concept of norm”, “a test norm is the result of performance of a test by a large group of people representative of the population” [6, p. 306].

Let us dwell in more detail on the basic requirements for tests (validity, reliability, etc.).

Reliability of tests. Test reliability is the effective application of the test “not only to the group of people for which it was developed, but also to a wider number of people” [5, p. 153]. For example, a test developed in Kazakhstan will not always work effectively when used in Europe, even if translated into the desired language (the peculiarities of translation, as well as the interpretation of words by test takers, should be taken into account). E.S. Romanova views the concept of reliability in a slightly different way: “Reliability of a test is a characteristic of its accuracy as a measuring

instrument, its resistance to interference (the state of the subjects, their attitude to the testing process, etc.)” [1, p. 68.].

However, one should not assume that if a test is reliable, then it is initially valid, regarding this V.V. Stolin writes that “In psychology, quite often a situation arises when a researcher first proposes a certain measurement procedure, showing its reliability - a way to consistently distinguish between objects, but the question of validity remains open” [14, p. 112]. Also V.V. Stolin created a formula for the relationship between the validity and reliability of a test, “Reliability is a necessary but not sufficient condition for validity. This leads to the basic relationship of psychometrics: validity  $\leq$  reliability. This means that the validity of the test cannot exceed its reliability” [6, p. 113].

E.S. Romanov notes that research in the field of test reliability began much earlier than the study of the validity and consistency of tests [1, p. 68].

L.F. Burlachuk writes that: “A test is usually considered reliable if it produces the same indicators for each subject upon repeated testing” [2, p. 176]. N.S. Shadrin also notes this moment. An example of reliability is the stability of a test over repeated testing. Some problematic test is taken and the same group of people is tested on it twice with an interval of 3 months. You can then calculate the correlation coefficient between the data from the first and second tests. If the correlation is reliably positive (close to 1), then this means the reliability of our test.

Reliability of parallel forms. This important direction means creating alternative forms of the questionnaire submitted by the same subjects, and then assessing the correlation between the results obtained.

However, according to the author, this method of checking reliability is problematic, as he writes: “The main problem preventing the widespread use of this method of determining reliability is the need to prepare two sets of tasks, which is extremely difficult, since additional evidence of their equivalence is required” [2, With. 177].

Reliability of test parts. This reliability can be determined by dividing the questionnaire into two parts. Typically, psychologists divide the questionnaire according to the principle of even-odd tasks. After testing, the process of calculating the correlation indicator between these parts occurs [2, p. 177]. However, despite such novelty L.F. Burlachuk is of the opinion that this method should not be abused and it is not always worth using it. He states: “It is usually recommended to resort to this method of determining reliability only in cases where it is necessary to quickly obtain results” [2, p. 177].

In the process of determining reliability, some controversial and debatable issues still remain, E.S. Regarding the problems of this requirement for tests, Romanova writes the following: “in the interpretation of specific reliability coefficients, and finally, in the understanding of the relationship between reliability and validity, there are still many controversial, or even simply unexplained, issues” [1, p. 68]. In addition, E.S. Romanova expresses the opinion that “blank spots remain and in the issue of factors creating measurement error, ways to increase the reliability of test methods have not been sufficiently analyzed” [1, p. 68].

Validity of tests. The validity requirement is, according to N.S. Shadrin, that “the test should measure exactly the quality that it claims to measure” [4, p. 152]. For example, a test aimed at studying motivation should study motivation, and not anything else. A test is considered valid only if it measures exactly the quality it was designed to measure. The validity of a test can be checked by applying two tests to the same group of people, the first, the validity of which is questioned, and the second, repeatedly tested in practice, revealing the same qualities as the first.

L.F. Burlachuk gives the following definition of test validity: “A test is called valid if it measures what it is intended to measure” [2, p. 181]. B.M. Regarding the validity of tests, Teplov writes that “the question of validity is the question of how much T. really measures what it should study and measure” [6, p. 306]. He also describes various ways of proving the validity of a test, including: face validity, concurrent validity, predictive validity, incremental validity, differential validity, content validity and construct validity.

Concurrent validity. In this method, the validity of a selected or developed test is assessed by conducting a correlation with another test that is initially valid. Regarding the method of competitive validity L.F. Burlachuk cites the opinion of P. Klein: “P. Klein notes that concurrent validity data are useful when there are unsatisfactory tests for measuring some variables, and new ones are created in order to improve the quality of measurement” [2, p. 181].

Predictive validity. L.F. Burlachuk gives the following example of predictive validity; “the predictive validity of any intelligence test can be shown by the correlation of its indicators obtained

from a subject at the age of 10 years with academic performance at the end of high school” [2, p. 181]. The reality of validity is determined by the relationship between two factors. The first is test indicators, and the second is a specific criterion that describes the property that we are measuring, but not currently.

**Incremental validity.** This method is used in exceptional cases: “one test from a battery of tests may have a low correlation with a criterion, but does not overlap with other tests from this battery. In this case, the test has incremental validity” [4, p. 172].

**Differential validity.** A highlight of the potential use of this type of validity is: “Interest tests generally correlate with academic performance, but in different ways across disciplines. The value of differential validity, as well as incremental validity, is limited” [4, p. 181].

The problem of reliability and validity was considered in detail in the classic work of A. Anastasi “Psychological Testing” (2003). In Part One of this book, entitled “The Functions and Origins of Psychological Testing,” she examines in detail the issue of test reliability (Chapter 4) and test validity (Chapter 5).

The use of computer technology in processing psychological tests.

Computer processing of psychological tests is an important area of research that combines psychology and information technology. With the constant development of computer technology, the possibilities for analyzing and interpreting the results of psychological tests are increasing significantly. This essay will look at the benefits and challenges of processing psychological tests using a computer.

**Advantages of processing psychological tests using a computer**

**Automation of the process:** Computers make it possible to automate the testing process, which reduces the burden on specialists and increases efficiency.

**Accuracy of results:** Computer data processing algorithms are capable of providing a more accurate analysis of test results, eliminating the human factor.

**Speed:** Computer processing allows you to quickly obtain test results, which is especially important in cases requiring rapid analysis.

**Objectivity:** Using a computer to process psychological tests helps reduce subjective assessments and provides more objective data.

## **Results**

Having examined the various stages of development and establishment of the test as a method of psychodiagnosis, we can say that the history of the use of tests in psychology is heterogeneous. In the early years, when the test was just beginning to be used as an experimental method, the opinions of psychologists were divided. Some argued that the tests would become the main method in the future, while others were quite skeptical about the tests. Now, the diversity and daily emergence of new psychodiagnostic tests indicate that the tests have firmly established themselves among the main methods of psychological research.

## **Discussion**

In the first chapter of his book, A. Anastasi highlights such a subsection as “Areas of application and types of tests,” in which she describes what led to the creation of psychological tests, “One of the earliest problems that prompted the development of psychological tests was the identification of mentally retarded people” [5, p. 16] in which areas the tests were originally used and to which areas of activity they were extended. The use of tests in the field of education is also particularly highlighted; “a powerful impetus for the initial development of tests was given by the desire to meet the needs of education. This refers to the famous Bine tests, with which, in fact, intellectual testing began” [5, p. 17]. In addition, in the field of education, the usefulness of tests lies in the fact that they are able to study such topics as “age-related changes in human development throughout his life, the relative effectiveness of different teaching methods” [5, p. 18], that is, by connecting these two topics, we can, for example, study using the example of school levels (junior, middle and senior) which teaching methods are most effective for each of the school ages.

Another area of application of psychological tests is the selection and distribution of personnel in industrial enterprises. Regarding this area, A. Anastasi lists the entire possible range of applications of tests in this area. From the assembly line operator or the clerical worker to the C-suite, there is hardly a job for which testing would not be useful in deciding hiring, assigning responsibilities, reassigning, promoting, or terminating.

A. Anastasi, summing up the widespread use of tests in all types of human activity, writes, the use of tests in individual counseling has gradually expanded from narrowly focused advice regarding educational and professional plans to consideration of all aspects of a person's life [6, p. 17].

Psychological tests are used not only in the fields of education, industry, etc., but are also one of the non-main methods of psychological research (see above). A. Anastasi also mentions this: "It is quite obvious that psychological tests are currently used to solve a wide range of practical problems. However, we should not forget that such tests are an important means of fundamental research. For example, almost all problems in differential psychology require recourse to testing methods as a means of collecting data" [6, p. 17].

#### **Conclusion.**

The theoretical data we obtained not only describe the methods of psychology, but also reveal various classifications of test methods (including the unique classification of R.S. Nemov, who studied the age aspect of psychodiagnostics, which directly affects educational psychology), and draw attention to the basic requirements for tests (validity and reliability).

One of the main conclusions that can be drawn is that psychodiagnostics is an integral part of the work of practicing psychologists, allowing them to make more accurate and reliable assessments of the mental state of clients. Thanks to a variety of techniques and tools, specialists can identify personality traits, intellectual abilities, emotional state and other aspects necessary for further work.

An important aspect of the development of psychodiagnostics is the personalization of the approach to each person. An individual approach allows us to take into account unique personality and behavior characteristics, which contributes to more effective diagnosis and care. This opens up new opportunities for a deeper understanding of a person and his needs.

It should be noted that the development of technology also plays an important role in improving psychodiagnostic methods. With the advent of new technologies, such as neuroeducational methods and computerized tests, specialists are able to make more accurate and objective measurements of mental processes.

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### **Тест - психологиялық әдіс ретінде. Даму тарихы және негізгі талаптары**

*Негізгі мәселе:* Мақалада психология әдістері ретінде тесттер мәселесі, психологиялық зерттеу нәтижелеріне валидтілік пен сенімділіктің әсері көрсетілген.

*Мақсаты:* Психологиялық зерттеу нәтижелері бойынша валидтілік пен сенімділіктің маңыздылығын ашу.

*Нәтижелер және олардың маңыздылығы:* Тестілеу – адамның психикасы мен мінез-құлқының әртүрлі аспектілерін өлшеуге мүмкіндік беретін психологиядағы маңызды әдіс. Психологиядағы тесттердің даму тарихы бір ғасырдан астам уақытқа созылады және Фрэнсис Гальтон мен Альфред Бинеттің жұмысынан басталды. Уақыт өте келе сынақтар білім беру, персоналды таңдау, клиникалық диагностика және зерттеу сияқты әртүрлі салаларда кеңінен қолданыла бастады. Тесттерге қойылатын негізгі талаптарға сенімділік (нәтижелердің қайталануы), валидтілік (өлшеу дәлдігі), стандарттау (бірдей сынақ шарттары) және объективтілік (бағалауда субъективтіліктің болмауы) жатады. Нәтижелердің дәлдігі мен негізділігін қамтамасыз ету үшін тесттер психометриялық принциптерді қолдана отырып құрастырылуы керек. Заманауи тестілер тұлға, интеллект, бейімділік және кәсіби дағдыларды тексеру сияқты әртүрлі өлшеу әдістерін қамтиды. Психологияда тесттерді қолдану нәтижелерді дұрыс түсіндіру және дәлелді қорытындылар жасау үшін кәсіби дайындықты қажет етеді. Психология әдісі ретінде тестілеу дамуын жалғастыруда және оның рөлі адам психикасы мен мінез-құлқын зерттеуде негізгі болып қала береді. Психологиядағы тестілеудің қолдану аясы кең, соның ішінде тұлғаның қасиеттерін бағалау, психологиялық бұзылуларды анықтау, өмірдің әртүрлі салаларында мінез-құлық пен сәттілікті болжау. Компьютерлік тестілер мен онлайн платформалардың дамуы тестілеуді зерттеушілер мен қатысушылар үшін тиімдірек және ыңғайлы етеді. Заманауи сынақтар мәдени айырмашылықтарды және жеке сипаттамалардың алуан түрлілігін көбірек ескереді, бұл дәлірек және бейімделген бағалауға ықпал етеді. Тесттерді пайдалану алынған деректердің сенімділігі мен негізділігін қамтамасыз ету үшін этиканы, құпиялылықты және сәйкестікті талап ететінін есте ұстаған жөн.

*Түйінді сөздер:* тест, тестология, психология әдістемесі, Ч.Спирман, валидтілік, сенімділік.

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### **Тест как метод психологии. История развития и основные требования**

*Основная проблема:* в статье освещена проблема тестов как методов психологии, влияние валидности и надежности на результаты психологических исследований.

*Цель:* Раскрытие значимости валидности и надежности на результаты психологических исследований.

*Результаты и их значимость:* Тестирование является важным методом в психологии, позволяющим измерить различные аспекты психики и поведения человека. История развития тестов в психологии насчитывает более столетия и началась с работ Фрэнсиса Гальтона и Альфреда Бине. С течением времени тесты стали широко применяться в различных областях, таких как образование, подбор персонала, клиническая диагностика и исследования. Основные требования к тестам включают надежность (повторяемость результатов), валидность (точность измерения), стандартизацию (одинаковые условия проведения) и объективность (отсутствие субъективности при оценке). Тесты должны быть разработаны с учетом психометрических принципов, чтобы обеспечить точность и достоверность результатов. Современные тесты включают разнообразные методики измерения, такие как тесты личности, интеллекта, способностей, а также профессиональных навыков. Использование тестов в психологии



требует профессиональной подготовки для правильной интерпретации результатов и принятия обоснованных выводов. Тестирование как метод психологии продолжает эволюционировать, а его роль остается ключевой в изучении человеческой психики и поведения. Тестирование в психологии имеет широкий спектр применения, включая оценку личностных особенностей, выявление психологических расстройств, а также прогнозирование поведения и успеха в различных областях жизни. Развитие компьютерных тестов и онлайн-платформ позволяет проводить тестирование более эффективно и удобно для исследователей и участников. Современные тесты все чаще учитывают культурные различия и многообразие индивидуальных особенностей, что способствует более точной и адаптированной оценке. Важно помнить, что использование тестов требует этичности, конфиденциальности и соблюдения правил проведения, чтобы обеспечить надежность и достоверность полученных данных.

*Ключевые слова:* тест, тестология, методы психологии, Ч. Спирмен, валидность, надежность.

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