

Rorschach Test and Neuropsychological Assessment: a Case Study

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Тест Роршаха и нейропсихологическая оценка: анализ случая

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Abstract. The present work aims to demonstrate the important role of the Rorschach Test in assessment. The interest arises from clinical experience in the office, using the Rorschach Test in clinical care. The contribution of this instrument in therapeutic planning is visible because it points out the compromises found in the personality dynamics, enabling the psychotherapist to act in this nexus of conflict, showing to the client his difficulties, so that he can build resources and be able to confront them. In neuropsychological assessment, the results from the Rorschach Test, which is a psychological assessment, together with all the information coming from other neuropsychological instruments, often become decisive in the path that the subsequent intervention plan should take. Therefore this article has the goal to connect the use of the Rorschach Test, a psychometric psychological instrument, with Luria's qualitative neuropsychological assessment within a cultural-historical point of view. At last a study case will be presented to illustrate the concepts brought up uniting quantitative and qualitative measures to provide a better and more personalized treatment to the client.

Keywords: *Rorschach Test; neuropsychological assessment; psychological treatment*

Аннотация. Цель данной статьи заключается в том, чтобы продемонстрировать важную роль теста Роршаха при диагностике. Интерес к данной тематике появился в результате использования теста Роршаха в клинической практике. Значимость

данного метода в терапевтическом планировании очевидна, поскольку он указывает на компромиссы, выявленные в динамике личности. Это позволяет психотерапевту воздействовать на причину конфликта, указывать клиенту на его трудности с тем, чтобы он смог создавать ресурсы и противостоять данным трудностям. При нейропсихологической оценке результаты теста Роршаха, который представляет собой психологическую оценку, вместе с данными, полученными при применении других методов нейропсихологического оценивания, часто становятся решающими в выборе направления последующей терапии. Статья нацелена на выявление связи между тестом Роршаха как психометрическим психологическим инструментом и качественной нейропсихологической оценкой А. Р. Лурия, разработанной в рамках культурно-исторического подхода. В статье также представлен случай из практики, который иллюстрирует концепции, объединяющие количественные и качественные методики, что позволит более тщательно подбирать индивидуальные схемы лечения для каждого клиента.

Ключевые слова: *тест Роршаха; нейропсихологическая диагностика; психологическое лечение*

Introduction

Hermann Rorschach (1921/1972) was born in Zurich on November 8th, 1884. He studied Medical School in Neuenburg, Zurich, Bern and Berlin, graduating in 1910. In the same year he married a Russian colleague from the medical school, Olga Stemplen, who became his co-worker and collaborator. In 1914, he specialized in psychiatry at the University of Zurich. Influenced by the psychoanalytic school, Hermann Rorschach, together with Zulliger, Ben-Eschenburger, Oberholzer, Biswanger and other colleagues, founded the Zurich Psychoanalytic Society. Despite having carried out some previous experiments, it was in the years 1917–1918 that Hermann Rorschach began a more systematic study of the use of the inkblot method in psychiatric diagnosis, especially in the diagnosis of schizophrenia.

Originally Hermann Rorschach (1921/1972) used a total of 40 different boards, which were soon reduced to 15. Even this greatly reduced number of boards represented difficulties for the publication of the work due to the high cost of printing. Most editors were willing to publish only 6 boards, with which Hermann Rorschach did not agree. Thus, throughout 1920, the finished work could not be published.

In 1921, Hermann Rorschach with the help of Walter Morgenthaler managed to negotiate a compromise with the Bern editor Burcher, he would edit 10 boards. The editor had problems reproducing the spots, so the edited boards were smaller than the originals and had previously non-existent shading. This is the current form of the Test. These changes were not a problem, in the contrary, represented new possibilities for the Test, possibilities that were not part of the original work. In June of 1921, with the help and effort of his friend Morgenthaler, he published the book *Psychodiagnosis*, containing the conclusions

of his studies with the boards he created. Rorschach himself, did not consider this book as a final draft, but as an initial draft of his work. This is the reason why he worked without rest to improve it until death, suddenly, surprised him (Rorschach, 1921/1972).

Hermann Rorschach died on February 4th, 1922, with 38 years, victim of an acute appendicitis crisis which was aggravated by peritonitis. He left an article about the Shading unfinished and interrupted his studies in relation to the *Psychodiagnostic Technique*, which was later studied and concluded by his followers.

We decided, this time to unite the only work that Hermann Rorschach left us besides Psychodiagnosis, still on the same subject. We refer to the conference *Contribution to the Use of the Form Interpretation Test* published after the author's death by Emil Oberholzer and which appeared in the volume of *Zeitschrift fur die gesamte Neurologie und Psychiatrie* (*Journal of Neurology and Psychiatry*) dedicated to the jubilee of Bleuler (Rorschach, 1921/1972, p.10).

The book *Psychodiagnosis*, "can be considered one of those imperishable classic works, which time cannot discredit and which, therefore, remains always current" (Ibid., p. 6a). The book is a big contribution of Hermann Rorschach elucidating the evaluation of the interpretation of ambiguous forms of paint. In this sense, we will start the explanation with a question, how do ink blots relate to Hermann Rorschach?

Over the years, specifically in 1911, Rorschach starts his studies and researches with ink blots, however his concern was broader than the simple study of *imagination* and *fantasy*. He wanted to obtain a method of *personality inquiry*, placing the interpretation of ink blots in the field of perception. But how did this happen? It is very simple to make such random figures (inkblots): some blots are made by randomly throwing the ink onto the sheet of paper. This paper is folded in half and opened. Now look at the blur and ask yourself: "What does it look like?" "Write to yourself and if you wish on the chat," "What does that look like?"; that is, what the expression of that blur immediately brings, what kind of perception. This is the 1st contact with the inkblot it is called the *association step* or *response* (Ibid.). Now, using the answer you gave about the inkblot in the first moment, ask yourself: "And why does it look like this?" "What characteristics in this inkblot led me to give this response?" This is the 2nd contact with the ink stain it is called the *inquiry phase*.

What is the goal? Understand the subject's perception to that stimulus. That is, he saw, extrapsychism, realized something, gave a *meaning*, as Vygotsky would say, and then he created his own sense, intrapsychism, using his cognitive, affective and relational resources from an unstructured stimulus field, he brings characteristics that were built through his ontogenetic development for that specific inkblot. So, from a first simple contact with the stain, each one will bring a deeper perception of what that blur means to each subject and what proper and internal sense the subject takes from that blur. Let's get to know a little more about the Rorschach Test and the neuropsychological assessment.

Rorschach Test and Neuropsychological Assessment

The Rorschach Test is a projective-constructive psychological test developed by the Swiss psychiatrist Hermann Rorschach (1884–1922). The Rorschach Test provides us with a perceptual-cognitive task, manifesting processes of decision making, problem solving, revealing confrontation strategies and of the subject's psychological organization. Hermann Rorschach had the task of understanding how the subject made this cognitive-perception, which resources he used to capture the content of what he saw. The test consists of giving possible interpretations to the 10 boards with ambiguous and symmetrical inkblots.

Rorschach wanted to obtain a method of interpreting personality, placing the interpretation of inkblots in the field of perception. That is, not only as the subject saw the stimulus and became aware of it; but how he perceived the inkblot, how he became aware of it in a profound way which is individual, personal and subjective.

In this sense, Hermann Rorschach was concerned not only with "WHAT" the person saw, but "HOW" he saw each inkblot, becoming aware of it in a profound way and relating such observations to mental functions, that is, depending on the development of each subject, his relationships and depending on the personality dynamics of each person, the expressions and inkblots are viewed in different ways. This analysis points to the close connection with the theoretical assumptions of Vygotsky and Luria. Which presupposes that each person perceives the world his own way according to his experiences in life and relations which constituted him.

Gattas and Guntern (2000) discuss that after the premature death of Hermann Rorschach in 1922, he left his work as a rich procedure to be further explored. Although the dissemination of the method, after his death, took place, initially, thanks to the efforts of Morgentahaler and Oberholzer, the first systematizations were done in the American continent, still in the late 1920s and during the decades of 30 and 40, arousing several systems. Each of the developed systems had similarities to each other, as they all remained faithful to Rorschach's original ideas, but contained differences resulting from the different theoretical backgrounds of their authors. The expansion of the use of these different systems, on the one hand, allowed for an increasing development of the technique, whether in the United States or Europe, and later, also in other continents, but, on the other hand, made communication between the different researchers and the application of developments and discoveries from one system to others.

The authors affirm that in the 70s, Exner, with the consent and encouragement of some of Rorschach's studios in the United States — Samuel Beck, Marguerite Hertz, Bruno Klopfer and Zigmunt Piotrowski and Rappaport gathered and systematized their knowledge and investigations. Therefore, Exner's initial proposal was to unify the main contributions of American authors in a single system that could overcome the complications arising from the exchange between researchers, creating obstacles to further developments of the method.

The Comprehensive System was created by John Exner Jr. from North American and was published in 1972. Through his work, the Rorschach Inkblot Test became a more useful psychometric instrument. It was not built on any theoretical assumption, it is an autonomous and more technical system, it does not need an in-depth study of a theory *per se*.

The comprehensive system is linked to what Vygotsky and Luria describe about the “subject” having a *dynamic* and *systemic* personality. The union of the comprehensive system which is essentially psychometric and quantitative + the cultural-historical approach and its qualitative point of view led to a more complete analysis of the subject. The cultural-historical theory focuses on *consciousness* and it is interested in the psychic functioning and the personality dynamics of the subject.

Consciousness, is the real understanding of reality, is having an understanding of the material world. It is objective, as it is external to man, however he appropriates himself creating a sense of his own, and the sense is internal, subjective, and unique. In this way, the activity theory developed by Leontiev (2004) argues that man’s development takes place through his relationship with the environment in which he is inserted, seeking for the satisfaction of personal needs. The development of mental functions will result from a process of appropriation of knowledge, that is, that human characteristics are developed by the appropriation of material and intellectual culture transmitted from generation to generation.

The cultural-historical theory gives us the possibility of looking at the comprehensive system of the Rorschach Test, which is more psychometric and quantitative, in a more qualitative way.

The Rorschach Test is a projective technique, a mediator, to assess the internal world of a person, the personality as a whole. There are answers given on the Rorschach Test which are recognized by many people but there are others which are unique, are only recognized by that person. And this means that each person has his own story, a way to look at reality.

The result of the Rorschach Test can be very well used in the psychological treatment of a client to give meaning and sense to his life. This way the person will be more involved and motivated enabling the treatment to transform that client. Human activities for Leontiev (2004) are considered as the subject forms his relationships within his life, which are driven by a motive, by objectives to be achieved. The idea of activity, thus, involves the notion that man is guided by goals, acting intentionally through planned actions.

According to Sforzi (2004) The need is a factor that triggers the activity, it is what concretely motivates the subject to have goals and carry out actions. It is such an important component that Sforzi adds “not every process is an activity, but only one that is driven by a need” (Sforzi, 2004, p. 97). The purpose has to do with what is intended in a more particular way in that activity, we could associate it with the objective. To achieve this objective, the conditions and the means to achieve it through actions and operations will be necessary.

Therefore the interpretation of the Rorschach Test will help the psychologist to treat his client to pass from his potential level of development to the real level of development where he will not need anymore the help of the other. The cultural-historical theory made it possible to do a new reading of the Rorschach's Test. Study and analysis the personality dynamic of the subject in a qualitative matter including the higher mental functions thus enabling a qualitative and quantitative interpretation of the test.

The systemic and dynamic understanding of the higher mental functions within the cultural-historical theory allows us to articulate with the aspects of the subject's personality dynamics once we understand that personality and psychism occur in a dialectical and univocal process. According to Luria (1981) the neuropsychological assessment aims to examine the mental processes of memory, attention, imagination, thought, action planning, verification and control of behavior, language, among others. These are all together in the functional systems implicitly linked to man's social context.

Vygotsky (2015) corroborates with Luria's ideas and states that human mental development occurs in a physical body that carries with it a biological apparatus capable of developing higher mental functions while being in relationship with other humans, inserted in a social and cultural context. In this sense, higher mental functions can be examined as artificial products of the human brain arising from the interaction of man with the social context.

Higher mental functions are fundamental forms of human conscious activity and must be considered as complex functional systems, formed in the course of a long historical and social development of man, as well as constituted with a hierarchical structure and a dynamic location. For example, in children, because they have a concrete form of perception and thinking, the language function is processed in the posterior portion of the brain, while in the adult, in which more abstract thinking and perception predominates, language starts to be processed in the anterior part of the brain. In this sense, Luria states that

mental functions, as complex functional systems, cannot be located in narrow zones of the cortex or in isolated cell clusters, but must be organized into systems of zones working in concert, each of these zones playing its role in a complex functional system, with each of these territories being located in completely different areas of the brain and often quite distant from one another. (Luria, 1981, p. 16)

According to the theoretical approach of functional systems developed by Luria, neuropsychological assessment assumes the role of analysing functional systems and identifying how higher mental functions are operating in the individual's brain, as well as understanding how the symptoms described by the patient are related to system changes. For Luria (1981) neuropsychology is a branch of science whose "specific and peculiar objective is the investigation of the role of individual brain systems in complex forms of mental activity" (p. 4).

The Rorschach Test — Comprehensive System

The Rorschach Test aims to understand the interrelationship of the subject's affective, cognitive, and relational aspects. And how these systems are integrated in mind control, information processing, self-image and interpersonal relationships.

When building an answer, and I love to see this moment, when the subject is looking at the inkblot and processing and organizing his answer, it is a magical moment for all of Rorschach's specialists, the subject needs to notice the inkblot and integrate the information based on his experiences and memories. The stimuli on the boards are ambiguous and need perceptive integration and thought and language to communicate the constructed response in an articulated way. Perceptual integration systems, which do simultaneous syntheses, using the temporo-parieto-occipital functional systems: memory, language and speech articulation must be involved in this process of the subject's response.

The subject's set of responses allows us to perceive how he interacts and integrates internal and external affective aspects, linked to the social environment. The coding of responses and interpretation are based on the comprehensive system, and data analysis is integrated with the systemic and dynamic understanding of the higher mental functions.

According to the *Coding Manual of Rorschach for the Comprehensive System* and the *Interpretation Manual of Rorschach for the Comprehensive System* both of Exner Jr. published in 1999, the structural summary is divided into 2 sections: *the upper section*, which refers to the sum of the frequency of all indexes obtained in rating the subject's answers; and *the lower section*, which will be shown in the next slide, is grouped into 7 blocks relating to the interpretation of the personality dynamics. And in the lower part are the 6 special indexes, the constellations, which will be described in more details a little later.

What is Rorschach's contribution in neuropsychology? All of the *cognitive triad* — *processing, mediation and ideation*. The cognitive triad demonstrates subject's attention in receiving processed stimuli (1st functional block) / how he maintains his sustained attention and information processing (2nd functional block) / and at last evaluate the subject's cognitive capacity through QD (quality of development) values to integrate and build, from unstructured forms, an articulated projective material with its own meaning (3rd functional block).

We can make an analogy of the cognitive triad with the TPO area, with executive functions, as well as with how the subject captures the first processed stimulus. The cognitive triad carries out the work of the associative functions of the 2nd functional unit (primary and secondary areas). Even more complex, the tertiary area, integrates into the third functional unit — frontal — to carry out the verification, planning and execution of tasks. Therefore, there is a participation of the entire dynamic and hierarchical system of the higher mental functions, which occur in an orchestrated and dynamic way. Not allowing a particular analysis of the gear.

According to the Exner's Jr. manual (1999) the processing shows the data on how the subject apprehends and incorporates information from reality, also indicating the level of intellectual development and the capacity to carry out analysis and synthesis operations.

When processing the stimuli, the synapses send the information to the occipital cortex (secondary area), but it also has a connection with the primary areas of the occipital lobe, which are the sensations.

The mediation — provides guidelines for knowing how the translation of the incorporated information about oneself and reality occurs, whether there is an adequate or distorted perception. Then the secondary area (analysis and synthesis) assume, already integrating the tertiary area, occurring the simultaneous synthesis which are in the TPO area.

The ideation is related to the thought, it brings elements that indicate how the subject thinks about his experiences, which results in deliberate decisions and behaviors, therefore a tertiary area integrating the third functional block — in the frontal lobe associated to the executive functions. Example: the subject may be able to think in a logical, coherent, flexible and constructive way, or on the contrary, show an incoherent, rigid and little constructive thought.

The affection within the limbic system in the diencephalon (subcortex) translates how the subject deals with emotional situations and how he expresses his feelings. It reveals how the impact of emotions and affections influence the subject's dynamics, organizing or disorganizing his behavior.

The thalamus performs the integration, analysis, and control of sensory, motor, and limbic system stimuli that come through the afferent pathways — the ascending activator reticular system. The thalamus distributes this information to the cortex, which through the neuronal axes continues the process dynamically and hierarchically. Optimal neuropsychological functioning requires the integration of the limbic brain with cortical functions. The Rorschach Test is the instrument that allows, through the analysis of the production of the subject on the test, the verification of how this integration occurs, as the subject will use his resources to build the answers.

Interpersonal section provides information on how the subject perceives the other and establishes his relationships, whether they are more sociable or more distant. Self-image — refers to the self-knowledge that the subject has of himself. It reveals the way people describe themselves and the concepts and attitudes they build about themselves, giving us information about their self-image and the value they attribute to that image, that is, self-esteem.

Control section located in the frontal lobe (3rd functional block — descending reticular activator system). It has a significant link with the limbic system, examines the subject's impulsiveness and control in stressful situations. Verifies the subject's capacity or not to deliberate productive actions to achieve practical ends.

The code EB is the heart of the Rorschach Test from it professionals perform all the analysis of the Structural Summary. It points out how the person is guided in life, how he lives his life. There are 4 basic response styles or experiential types: *introversive* — a basically ideational subject prefers to delay decision taking until he considers all the alternatives; *extratensive* — a more emotional subject mixes affects with thinking during his problem solving activities influenced by external information; *ambiguous* — greater vulnerability to difficulties, needs more time to complete his tasks and has less

internal consistency, has an unpredictable behavior because a low amount of answers leads to a rigid defensive behavior and a greater predisposition to *impulsiveness*.

The variables — C, C', T, V, Y present in the control section are a signal of all affects that trigger lack of cognitive control, frontal compromise, excessive impulsiveness, difficulty in affective and cognitive control and no criticisms.

Therefore, the analysis of the Rorschach Test joined with Luria's neuropsychological assessment done in a dynamic and integrated way gives the vision of the *whole*, of the whole psychological functioning of the human being. It is noteworthy that the use of assessment instruments, both neuropsychological and psychological, serve to give us clues on how we can work in the intervention of the patient, enabling him to new constructions through the transformation of the superior mental functions.

To finalize, the analysis of the comprehensive system, according to Exner Jr. and Sendin (1999) left a big legacy — the constellations. *Constellations* are a set of statements that validate a given group of signs:

- when there is a positive SCZI — Schizoaffective Index — the subject presents difficulties in affective relationships, generally thought and perception are compromised, it is a reliable indicator of disturbance in thought and perception, especially if the subject gets the maximum score. SCZI = 4 it indicates a Hypothesis of the existence of a psychotic disorder / SCZI = 5 allows you to think seriously about the possibility of this psychotic disorder / SCZI = 6 it is almost certain of that this kind of disorder is present;
- when there is a positive DEPI — Depression Index — it intends to assess whether the subject is living in a situation in which depressive symptoms occur. DEPI = 5 it suggests the existence of affective disorders that may lead to the experience of depressive episodes / DEPI = 6 it indicates the hypothesis of the existence of a relatively serious depressive state / DEPI = 7 elucidates the existence of depression (which may coexist with a positive Suicide Potential Index). However, many times the person does not commit suicide and it is not because he is not depressed, it may be due to anxiety; low activation of the 1st block; or lack of intention to act;
- when the CDI is positive — Coping Deficit Index — it indicates difficulties in interpersonal relationships, difficulties in engaging in the day-to-day demands, assesses the lack of resources for confronting and solving problems in various situations. CDI = 4 it suggests the existence of some difficulties in dealing with the situations / CDI = 5 expresses the certainty of these difficulties;
- when there is a positive SCON — Suicide Potential Index — it is characterized by depressive elements, low self-esteem, pessimism at the level of ideation, negative introspection, presence of elements of isolation, interpersonal difficulties, reduced self-control of impulsivity and perceptual maladjustment;
- when there is a positive HVI — Hyper Vigilance Index — it consists of a state of continuous alert towards the environment, which requires a considerable availability of energy. The exacerbation is accompanied by paranoid-like manifestations, the need to control everything (a phobic-anxious symptom). It is interesting

to know if it is from the basic structure of the subject or if there was an accident that caused this behavior;

- when there is a OBS positive — Obsession Index — it is marked by perfectionism, excessive concern with details. Subjects are extremely cautious in their processing behaviors, the information is collected in a meticulous manner, meticulously fixed on details that go unnoticed by most people. They are overly conventional, neglecting creative abilities. This index has negative characteristics, as the excessive effort to improve or reorganize small details tends to interfere in complex situations that require immediate answers. It is noteworthy that all these data presented should not be examined in isolation, but crossed with the clinical history and other instruments applied.

The Rorschach Test is not a pathognomonic instrument of a specific pathology, however, within the clinical experience, the proper use and the expert eye in the analysis of the instrument's production provide valuable information to understand the dynamics of the individual's functioning, the psychodiagnosis differential and very reliable tracks for proper referrals. The Rorschach Test is more than a projective personality test, it is a projective-constructive test, which provides a perceptual-cognitive task, manifesting processes of decision making, problem solving, revealing confrontation strategies and the subject's psychological organization, obtaining a broad picture or profile of the subject's neuropsychological dynamics.

As we just saw in the comprehensive model, we find the constellations, which gather evidence considered "special," that is, not expected at first hand, but which together provide clues to some unusual functioning of the subject's brain. Extending this analysis, in some schools there is a survey of evidence that shows alterations of brain lesion origin, the best known is the Piotrowski Series, used by Piotrowski himself, as well as by the Brazilian Aníbal Silveira School.

According to Coelho (2000) there are some red flags for us to be very attentive to in the Rorschach's Test because they can indicate a neurological disorder. Piotrowski's Series consists of 10 signals to be evaluated when positive in a protocol. They are:

- nC-Color Naming — in front of the stimulus, the subject only verbalizes the color name as a satisfactory answer, without giving any explanation. For example: "This is red. — But what made you see this red? — Ah, because it's red." There is an inability to perform an adequate association with that stimulus. There is a productive limitation. And when he repeats: "Ah! Because it's red." — there is a lack of criticism;
- Ppl — reveals the subject's perplexity in face of the stimulus, there is difficulty in expression, he is impacted. Bringing insecurity about their cognitive capacity, they need the examiner's support, and even when they try to give an answer, they keep asking whether it is correct or not. Increasing your reaction time to the stimulus or response, deteriorating the quality of production;
- Aut — it is an automatic response, stereotyped phrases, filling. For example: "This is a butterfly, brooch." "This is a heart, brooch." The subject brings an answer

without being able to explain, cannot inhibit, contain verbalization, as a mechanical reaction to unfamiliar situations. He does not realize he repeats. Raising the hypothesis of “malfunction” of their mental work, common to the functioning resulting from brain damage;

- R — total responses less than 15;
- T — initial reaction time, expected 60 seconds. If there is a longer time, the subject has a delay in responding to this stimulus. It presupposes some difficulty when capturing and building this stimulus for you;
- M — a single human movement response, or none. Human movement speaks of autonomy, independence. It provides information on how this subject permeates his environment. Difference from Silveira to the comprehensive system: for Silveira the movement must be clear, there must be a perception of kinesthesia / for the comprehensive system — the movement is present by any record of propulsion or retraction;
- F+% — conventional pure form /%F + less than 70 % (or 75 % for Silveira). The subject does not see things, life objectively, as being repressed. See in a more unusual, distorted way, within a subjective view;
- Lib — inappropriate answers, due to inability to repress them. The subject even recognizes that his response was inadequate, but he cannot contain it, there is a lack of restraint, he is impulsive. This mechanism stems from the fact that patients with brain injuries have the capacity for self-criticism preserved, but they are unable to correct their mistakes. Lib can occur in a normal adult protocol, but in this case, this is due to the examinee’s awareness of the numerous possibilities of interpretation offered by the Rorschach stimuli, and that he was too hasty in choosing his response;
- Rpt — repetition of the same answer on at least three different boards. It is the perseveration (PSV) of the comprehensive system. The first answer in this series may be accurate, but the rest may be poorly defined. The subject repeats the content of the previous answer, he stays attached to that point, he does not evolve;
- %V — percentage of common answers less than 25 % (they are the popular answers of the comprehensive system). Indicating a certain degree of difficulty in apprehending the thought patterns that make up the social consensus (Coelho, 2000).

The occurrence of five signs of the Series would be enough for referral to an evaluation by a neurologist. These are signs that give clues, raise hypotheses that need to be crossed with other data from the subject, but they provide clues, empirically observed by well-trained Rorschach psychologists.

Study Case

The analysis in this work will be illustrated by a study case of the assessment of a 19-year-old patient M., user of drugs such as crack, marijuana and glue, for 8 years, which currently presents a hallucinations, recurrent idealization and a lot of insecurity in interpersonal contact. M. presents a history of intense drug addiction. The Rorschach Test was used to identify in more detail the personality dynamic of M., in other words, how were the intellectual, affective, emotional and interacting resources, the ability to control internal tensions and the resources used in this control.

M. was a 19 years old single man. He was presenting many difficulties in relating to people. He was having difficulties to leave his home to go to work and even to walk. This difficulty was implicitly linked to the fact that M. believed that the others “read his thoughts” and “went inside his head.” This feeling made M. insecure in the presence of foreign people. He felt that people would attack him when they got into contact with his thoughts. However, when asked what kind of thoughts gave rise to the fear of aggression, M. laughed at the thoughts that he was an outlaw, a murderer. He also referred that when in front of the television, he had the feeling that the characters knew what he was thinking. According to the family report, M. had been using drugs for 8 years, during which he lived on the street, as he left home at the age 11, although he returned sometimes to his house.

Structural Summary

Structural Summary analysis with data obtained: the subject demonstrated distortion in the processing of reality data, responsible for his internal distress ($\text{Sum6} = 5\uparrow$; $\text{WSum6} = 14\uparrow$) and the feeling of being invaded by affects he did not know categorize such as anguish, anxiety, helplessness ($V = 1\uparrow$; $Y = 3\uparrow$; $m = 3\uparrow$; $C' = 4\uparrow$).

When compared to others, his personal value was negative, with a less favorable self-image not believing in his own abilities ($3r + (2)/R = .28\downarrow$; $V = 1\uparrow$). His perception of the events was distorted due to the difficulty of emotional comprehension, which provided these hallucinations, functioning far from the conventional ($P = 4\downarrow$), triggering distortion in thought and action ($\text{Sum6} = 5\uparrow$; $\text{WSum6} = 14\uparrow$) by interference from subjective emotional nexuses ($Y = 3\uparrow$; $V = 1\uparrow$; $C' = 4\uparrow$).

The lowered lambda ($L = .21\downarrow$) demonstrates how emotional aspects interfere in the perception of reality facts and ends up distorting them ($X+\% = .39\downarrow$; $Xu\% = .50\uparrow$). The irritating internal stimulation is high ($es = 14\uparrow$), taking hold of the few available resources ($EA = 5.0\downarrow$). In this sense, the limbic circuitry (Y, V, C') acts intensely on the 2nd and 3rd functional block, dismantling the capacity for analysis and synthesis, that is, associative functions — TPO — examined through the variables $DQ+$ and DQv , impacting on the execution of their intentions and actions in the middle (3rd block).

The high level of situational stress of an ideational and emotional nature ($m = 3\uparrow$; $Y = 3\uparrow$), linked to special codes ($\text{Sum6} = 5\uparrow$), predisposes to incongruous, disorganized reasoning. The intense situational irritating stimulation of an ideational and emotional nature (m and Y) acts on the higher psychic processes (attention, memory, capacity for

analysis and synthesis; problem solving) disorganizing the functional systems in a dynamic and systemic way.

The predominance of incongruous thinking, without logic, distorted view of reality, corroborating with disexecutive behavior ($\text{Sum6} = 5\uparrow$; $\text{WSum6} = 14\uparrow$; $\text{X}+\% = .39\downarrow$; $\text{Xu}\% = .50\uparrow$).

He demonstrated a self-concept based more on imagination than on experience, and his conceptions regarding the other were more illusory than real ($\text{H} = 2\downarrow$; $\text{Hd} = 2\uparrow$). The individual's thought flow was undergoing changes due to the affective discharge he was feeling, interfering with his attention and concentration ($\text{Y} = 3\uparrow$; $\text{V} = 1$; $\text{m} = 3\uparrow$; $\text{C}' = 4\uparrow$). There was a need to approach others, but due to their affective immaturity, their contact was cautious, reserved due to the insecurity and vulnerability they felt ($\text{T} = 0$; $\text{Afr} = .38\downarrow$).

Final Considerations

Quantitative and qualitative analysis of the Rorschach Test did not allow us to think that the attentional systems were impaired, mainly because they were influenced by the affective impact of the feeling of insecurity, which influenced M. especially when he was in the presence of others. Thus, the invasion of affections, associated with their psychological immaturity, interfered in his thinking, compromising and making it difficult for him to understand the reality data. He felt he was being invaded by the thought of the other, and being able to be attacked by the other, which reinforced the feeling of insecurity and the fragility felt by M.

His distorted view of reality, his incongruous thinking, as well as the action of the limbic circuitry impacting in an important way in all neuropsychological dynamics, leads him to have difficulties in all productive actions impacting on the change of superior nervous functions. The organization of simultaneous syntheses, responsible for the organization of the subject in the external space, both in the visuospatial orientation (right-left, top, bottom, etc.), as in the logical grammatical constructions (heart of stone, brother's father and father's brother, etc.), were influenced by affections, leading to disjointed perceptual and grammatical constructions. These psychic functions triggered the thought that people could invade his thinking, making it difficult to perceive the external environment.

The distortion in M.'s thought was influencing his action in the external environment and in interpersonal relationships. The difficulty of restraining his thoughts, because of the compromise of the frontal region, responsible for the executive functions and control inhibition made M. enter a cycle of ideation and action in which he was not able to be restrained internally by his superior mental functions. Therefore, we could understand that M.'s psychic dynamics was marked by psychological immaturity and an influence of affective aspects that influenced the production of thoughts.

The diagnostic hypothesis, in the psychological interview, was that M. had a psychic dynamic common to an affective psychosis, which was corroborated by the results obtained in the Rorschach Test, characterized by a personal and distorted view of reality, resulting from the excess of the affective aspects of his personality, structurally immature and without self-control resources to deal with internal tensions, leading to difficulty

of interaction in interpersonal relationships, which ended up permitting him to succumb to chemical dependency.

Suggestions

- (1) Psychotherapy, for the construction of one's own value systems for the development of autonomy and understanding of his own feelings.
- (2) Neuropsychological remediation, focused on attention, concentration, working memory and action planning.

These two suggestions are due to the immature personality of the subject, caused by the abusive use of drugs, for an intense period, which did not provide resources for the development of his mental functions.

Conclusion

The study of the Rorschach Test provided us with a view of how the functional systems of each subject is organized and acts on the neuropsychological dynamics. The way the subject realizes the random forms of paint, correlating them with Lurian neuropsychology and how the functional systems are articulated in an orchestrated way, providing a response to the first stimulus captured through the afferent pathways (SARA — Ascendant Reticular Activating System), processed and integrated through simultaneous analysis and syntheses and executed by the frontal system. This perception will have its own meaning according to the ontogenetic development of each subject, providing an understanding of how every dynamic and hierarchical system of the higher mental functions occurs.

Therefore through the use of the cultural-historical theory and the theoretical assumptions of Vygotsky, Leontiev, and Luria, it was possible to analyse Rorschach's Test, contemplating the personality dynamic of the subject, both in qualitative and quantitative terms, as a biopsychosocial human being.

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