

Star-wave Test-a Multifunctional Psycho-pedagogical Instrument

Magdalena Dumitrana

The Star-Wave Test is one of the most interesting and challenging test and at the same time possessing an esthetic side. It was developed initially in the analysis work on handwriting. However, soon this test revealed its value as a projective test and further, its potential for screening preschool children as they are or not, ready for school. The present paper presents the possibilities of the SWT in analysis of the children attending the kindergarten, especially the ones confronting emotional problems.

Key words: Star-Wave-Test, drawing, projective, disturbance, children at risk

INTRODUCTION

The Star-Wave Test was created by the German graphologist and psychologist Ursula-Avé-Lallemant (18. XII.1913-11.VII.2004) and it was based on the graphological concepts.

The test was first published in German in 1979 and it was translated into English in 1984. [1]. The test allows to separate forms (the stars), free movement (waves) and space organization (the framed space of the standardized test-sheet).

The SWT can be performed individually or in a group, without a time limit. However, it is recommended to be used individually. Small children try hard to perform the best possible, therefore they are inclined to look in the others' drawings and copy their ideas. Also, it seems to be important to watch the children behavior - motor, verbal and the graphic one.

THE TEST

Description

The drawing is made on a standard form sheet (half of an A4), inside of a graphic frame (15,5x10,5 cm). A sharpened pencil and a rubber, not of a good quality are provided. The reason for the last one is to keep visible the traces erased and corrected by the child.

The test instruction is: "Draw a starry sky over the ocean waves". Small children may be asked if they have ever see stars and waves. Many of them have not an experience of the ocean, or waves. Still, they have the experience of the waves in the bathtub and the examiner reminds them about that. The small children may not know the word "ocean" and for this reason, we have replaced this word with "sea".

There is a possibility also, that children to confuse the words. For example, in Romanian, the words 'sky' is similar to 'circle' (sky=cer, circle=cerc), so, in a number of cases, the children understood and drew a circle (cerc) instead of sky (cer).

During the drawing execution, the examiner records the order of drawing the different elements and their direction. Any remarks the subject makes and any unusual behavior and emotions are also noted.

Aspects that can be evaluated

According to Dafna Yalon and Gudrun Schmuck, several aspects of the test were examined, since its creation:

- the anthropological approach: it was found out that the SWT is generally, culture-independent. However, it is possible to meet children living far away from lakes and seas or who cannot see the stars (for example, children living in cities, in places with crowded buildings);
- the developmental approach: it contains several aspects, as it follows:
 - the examination of the perceptual, cognitive, motor and grapho-motor functions (up to age of 10)
 - the school readiness

- the personality development (the projective aspect)

There are two directions of examination in order to approach these elements and these are:

- the way, different mental processes are involved in the task execution and
- the development of the graphic skills.

Strategies in the task execution

There are several elements that has to be taken into consideration:

a) *understanding of the task*

There are three possibilities of the execution, expressing the degree of the task understanding:

- * the correct solution - the child draws stars over the sky)
- * the partial solution - only one of the two elements are represented, only the stars or only the waves
- * the wrong solution – the child either does not draw anything or scribbles something or just draws whatever he likes

In this the last case, the examiner has to be careful if the test was taken in group; the child presenting the wrong reaction just did not like the subject and tried something more pleasant.

b) *recalling the mental representations of the stars and waves*, even they are draw incorrect (from the point of view of an adult standard)

c) *graphic execution*

The stars are represented as static, structured and close forms. The waves are drawn as sinuous, open and dynamic curve lines.

d) *organization of the space*

The drawing has to exhibit two distinct layers-one of the stars and the other, of the waves. Also, the graphic elements must be kept within the frame, though the examiner does not ask his specifically.

The development of the graphic skills

There was found out that there was a well-established pattern of the children drawings in SWT, confirming the general development of the graphic skills: most of the 2 and 3 year old produce *scribbles* that are actually, a pure movement, having no form or organization. The child enjoys moving his hand and producing traces; to him, this movement is also experimentation.

The scribble is normal at this age, but if it is found as the graphic production of a 4 or 5 year old, this may be a sign of mental retardation,, fixation or regression to an earlier stage. [4, p.6]

The next phase is the *geometrical stage* when the child is able to produce circles, mandalas and sun-shaped stars. From the psychoanalytical point of view, finding a form means finding an identity, distinct the former one, which was defined by the mother-child bond. Now, the shapes express the separation from the mother.

There is no expectation of correct spatial orientation of the stars(up) and waves (down); children change the direction in the page, changing also their bodies positions.

The correct spatial orientation is expected by age 4, the latest - 5; also, the child respects the borders of the frame. If these two criteria are not fulfilling by the age 5, some organic or emotional problems are to be expected.

Therefore, a 5 year child is expected to:

- reach the stage of the *schematic drawing*, that means that he is able

- to draw easily forms of the stars and waves (not as a standard forms)
- to organize correctly the elements: the stars are arranged in a row at the upper part of the frame often placed above a high horizontal line (the sky).
Some children add decorative and symbolic elements.

From now on there is a continuous improvement of the quality of the forms and the movements. Gradually, the gap between the sky and sea is filled up. This phase is called the *realistic stage* of the drawing, when a more naturalistic picture is achieved (age 9). Beyond 9 years old, the arrangement as a row expresses an infantile and monotonous thinking.

School readiness

This topic was the object of two research projects, one lead by Chana Ben-Zion and Dafna Yalon on the 5-year old Israeli children and the second, by Anna Kucharska and Jaroslav Šturma on 5,6- year-old Czech children.

Kucharska- Šturma study choose as criteria:

- a) the graphomotor abilities, the quality of perception and their coordination:
 - motion coordination of lines combined with the autoregulation
 - the formal processing of space
 - the symmetry and the proportion in stars formation
 - the harmony in waves' representation
 - the size of the represented details
- b) the existence of the all three test components: the stars, the waves, the spatial arrangement (including the acquisition of the concept "above"). [2 p. 81]

Yalon and Ben-Zion research followed a quantitative method. The total score of the maturity took into consideration the following 6 items:

- a) task understanding
- b) form of the stars
- c) waves motion
- d) spatial arrangement
- e) frame recognition
- f) qualitative level (traits that help children coping in school, as perseverance, diligence, etc) [3, pp. 51-52]

The first project results in a scale and the second one, in a screening tool.

The projective aspect

The interpretation of the stars and the waves is based their archetypal signification, as well as on their place in the drawing. Also, the four spaces created by the frame division in four areas traced by the two imaginary lines, horizontal and vertical.

These imaginary axes are taken into consideration as symbols for time, feminine and masculine principles. The axes combination creates four corners: upper left (the inner values), the upper right (the outer values), the lower left (the earliest memories, regression), the lower right (instinctual and material interests). The central area indicates a positive self-esteem, or an inflated Ego.

There are presented sometimes other symbols, having a special meaning in SWT, as:

- Moon: an authority figure, sometimes the subject himself (placed in the centre) as feeling different and not belonging to the group or situation.
- Sun: a dominant figure (usually father, but also, a dominant mother); the sun can be pleasant, warm or dangerous, burning.
- Comets and falling stars are movements toward a goal.
- Clouds: anxiety, unclear goals
- Rocks: conflicts, obstacles

- Boats: existential insecurity
- Fish: life and emotion; they can be cute or dangerous, expressing the nature of the emotions.
- Gliders, surfboards, pirates: may signal children at risk [3,pp. 12-16]

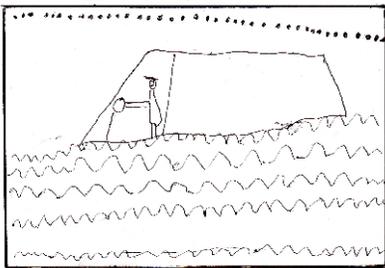
The graphological aspects are also integrated in the projective elements, supporting them and offering details. There are several elements concerning:

- + The form, seen mainly in the way the stars are drawn
- + The movement expressed by waves; they are dynamic or static
- + Arrangement is represented by the organization of the elements; there may be harmony, regularities or disturbances, irregularities.
- + Stroke qualities- are taken from classic graphology and judged accordingly to the whole structure and content of the drawing.

AN EXAMPLE

Here there is a drawing of a well educated child, coming from a normal family where is loved and motivated to display a good behavior and interest for knowledge.

M.I., boy, 7 yrs old, only child



From the kindergarten teachers' report: The boy and his family live in a rural area; the financial situation is comfortable and the emotional climate is good. Both parents have attended high school.

The child's drawing behavior: Starting from the left upper corner he draws a star, erases it, draws another one and erases that too. Giving up the stars, he draws the higher wave (left to right) and then he fills with waves the whole space under the first one. The waves are hardly visible. He draws the stars as tiny black circles, and one can feel that he is displeased with this product, but he says that it is the only way he is able to draw the stars. He asks the permission to draw a ship. So, he draws the ship and then the "driver" he says and "He needs a driving wheel". Therefore he draws it, but the driver's hands are too short. He makes them longer and comments: "Now, he can reach the wheel."

Comments: As a whole, the drawing is quite balanced, that is every element is in the right place; the organization of the stars and the rhythmical curls of the waves express a tendency to organize the world around. However there is an obvious dominance of the emotions (waves occupying a large area) over the stars. However, a certain regularity of the waves shows search for inner balance. The gentleness of the dots-stars shows a sensitive perception, as well as the weak pressure of the waves strokes expressing receptivity. The most of the waves adhering to the frame constitutes an important sign of insecurity [5, p.131]

The central figure, covering almost the whole space between the stars and wave has an essential clue. There is a very large boat, lead to the left by a human personage. The symbolism, therefore, is the following: " Boats may frequently signify existential insecurity (especially when they are large) and more specifically – a mother problem, as they can be related to a symbolic womb. [...] In tests of children, an early tendency to take responsibility can be a warning sign pointing to parental neglect. The direction in which the boat sails...is most significant [...]. It may move to the left, inwardly, showing introspection, or a desire for better relations with partners." [5,pp.102-103]

There is nothing in the KG teacher's observations that warns about the child's problems in the family. It may be nothing objective. Still, the drawing expresses the way feels and lives his relations within the family. His sensitivity and receptive qualities may make him to experience very strong situations that pass unperceived from outside. Whatever reason, the child's drawing conveys a strong feeling of insecurity, a lack of help from outside and the efforts the child makes, striving to cope this emotional situation.

CONCLUSION

The very quick overview of the SWT shows that it can be a powerful instrument for approaching human being on various levels, having multiple applications, from the evaluation of the maturity degree of the growing child, school readiness and psycho-motor processes development to the profound analysis of psychoanalytical type.

REFERENCES

[1] Avé-Lallemant, U., the Star-Wave Test, Munich, Basel: Ernst Reinhardt Verlag, 1984.

[2] Kucharská, A., Šturma, J., The Star-Wave-Test in the Diagnosis of School Readiness, in The Star-Wave-Test. Symposium Proceedings, Educational and Psychological Counselling of the Czech Republic, 1997.

[3] Yalon, D., Ben-Zion, Ch., A Quantitative Method for the Assessment of the Functional and Expressive Aspects in the Star-Wave-Test as a Diagnostic Tool for Kindergarten Children, in The Star-Wave-Test. Symposium Proceedings, Educational and Psychological Counselling of the Czech Republic, 1997.

[4] Yalon, D., Schmuck., G.,The Star-Wave-Test, International Graphological Colloquium, Paris, June, 19th, 2003.

[5] Yalon, D., The Star-Wave-Test Across the Life Span. Advances in Theory, Research and Practices, The International Graphological Colloquium, 2006.

ABOUT THE AUTHOR

Assoc.Prof. Magdalena Dumitrana, PhD in Psychology, PhD in Pedagogy, Faculty of Educational Sciences, University of Pitești, Romania Phone: 072 477 6004, e-mail: mdumitrana@yahoo.com

Докладът е рецензиран.