

## CHAPTER 7

### PERFORMANCE MEDIA

#### 1. INTRODUCTION

When discussing performance media, it is emphasized that all such media should be viewed as **observation media** and that, from the moment of acquaintance, the child must be observed pedagogically, because no gesture, remark or action is insignificant (see 77, 40). The following media are particularly appropriate for observing the child's intentional going out to the world.

#### 2. THE "GUIDE-IT"

This medium consists of an almost square board of approximately 4 1/4 by 4 1/2 inches with a rim on three sides, and a hole in the middle, and it is mounted on a stand 3 1/2 inches high. The side without a rim is connected to a small board 4 1/2 inches wide and 13 1/4 inches long with a rim on each side which slopes downward almost to the bottom. This skew board contains smaller strips of wooden barriers which lie transversely or with a corner obliquely to the top as well as a few small round holes. An iron marble is placed at the bottom of the transverse board which has a rim while, a 6-inch-long wire with an eye at the end is given to the child and he is asked "What do you think you can do with this?" The objective is to see if he/she will conceive the idea him/herself of pushing the marble with the wire (which has an eye or loop at its end) through the barriers to the top of the horizontal board so that it falls through the hole.

If the child does not discover this him/herself, he/she is helped to push the ball a little way up, and it is then left to him/her to complete the task, i.e., if he/she understands the objective. In any case, his/her behavior is accurately observed, and special attention is given to the following: does he/she arrive at the insight him/herself that the marble can be pushed with the wire through the barriers to the hole above? Does he/she accept help? What is the state of his/her fine muscle coordination; of his/her left or right handedness; directedness; enthusiasm; how is he/she influenced by failure?

### 3. THE "PASSALONG"

This medium is a subpart of the **Alexander Performance Scale**, whose primary aim is to evaluate the child's practical intelligence. However, the **Passalong** also is extremely appropriate as an **observation medium**. Among other things, attention is given to a possible passive approach, and trial-and-error methods, instead of planning, and if there is evidence that the course of thinking rises.

### 4. THE KOHS BLOCKS

This medium also is a subpart of the **Alexander Scale**. Originally, it was designed by S. C. Kohs (see 110, 77) but later several modified forms were offered. Here, 16 one-inch cubes are used, where each cube has a red, yellow, blue, and white side, and a diagonal red-white, and a diagonal blue-yellow side. In addition, there are six cards of colored geometric figures which the child must reproduce with the blocks. From card 1 to 6, the patterns increase in difficulty. Particular attention is paid to whether the child merely puts the blocks alongside each other, if he/she works by trial-and-error methods, or if he/she works methodically, and with a plan.

There are several variations of pattern construction media, such as the Goldstein-Scheerer stick medium (73), where the child is asked to lay out such stick-figures him/herself according to the models of stick-figures presented to him/her.

### 5. THE "WIGGLY BLOCKS"

The **Wiggly Blocks medium** consists of nine sawed wooden blocks, divided by four curved band-saw cuts. There are four **corner** blocks, four **side** blocks and one **middle** block. It was originally designed by J. O'Connor (186), who viewed it as a selection medium regarding a person's **technical thinking**, to "measure" the spatial "ability to form images, to determine if "one can imagine the essential structural relationships", according to Van Gelder (287, 139).

Especially in the U.S.A., there was an attempt to remove the subjective from observations, and interpretations and the **Wiggly Blocks** became an **achievement test** for primarily determining how **long** it takes a person to put the pieces together. There was a search

for “factors” which are significant to this "building" activity, and which then holds for all "building" activities regarding this medium.

Ouweleen (188) describes the development of this medium, from an **instrument for measuring** spatial representation to an **observation medium**. At present, in the Netherlands (see 97, 20) and in South Africa, it is widely applied as an observation medium.

Although it also is used to evaluate a child's **practical intelligence** (see 95, 63), in an orthopedagogic evaluation, it is implemented only as an observation medium, where the point of departure is the total situation. Thus, in the first place, this does not have to do with the child's proficiency itself or determining the amount of time (using a stopwatch) it takes him/her to complete the task. Rather, it has to do with his/her ability to **synthesize**.

Regarding the use of this medium, the investigator explains to the child how the blocks are designed, how the different parts came about, and that there are blocks with a straight side and others with wavy sides. The blocks then are taken apart before the child, and he/she is asked to put them together again. Joubert (95, 61) notes that an analysis of the structure of the blocks by the orthopedagogue and the child, and a discussion of how it is formed by sawing, and the number of blocks that, thus, have been created, the number of flat and wavy sides, etc. occur for a two-sided aim: on the one hand, the child is familiarized with the performance material and, on the other hand, the investigator attains insight into the ways he/she is able to acquire insight into the material (see also 188, 85, 86).

With respect to the performance situation, the child finds him/herself in a **task situation**. He/she lived experiences particular problems, successes, or failures and, in his/her own ways. He/she must respond to the difficulties he/she lived experiences.

By observing and interpreting his/her **responses** to this situation, an indication is gotten of his/her **approach, lived experiences, etc.** (see 95, 63). Joining with Joubert (95, 63), it is indicated that this medium lends itself to observing the child in his **I-piece of work situation**, and in his/her **I-piece of work-society situation**, by which is meant his/her response to the task in the present, under the view of another person.

Regarding the **I-piece of work situation**, the appeal, as task, which the child encounters is repeated each time he/she becomes "disillusioned" because he/she is not yet able to reconstruct the "familiar" structure of the block, and he/she usually discovers that it really is more difficult than he/she initially expected. He/she also can't discover this aim, because the block still asks for completion, and he/she is thoroughly captivated by the task (95, 63).

Concerning the execution of a task in the presence of another person, he/she lived experiences that his/her performance is being judged. The fact that he/she lived experiences that he/she is judged, and that he/she "must" complete the task, implies that, because of his/her wanting to be someone him/herself, he/she does not want to fail.

Since the child has a very good grasp of what he/she must do, and lived experiences that he/she is judged, getting stuck also is a lived experience of failing as a **person**, and that he/she cannot show what he/she wants to show. Thus, the orthopedagogic evaluator also must observe how he/she behaves if he/she gets stuck. An indication is gotten of his/her attitude toward his/her own performance, and if the mistakes he/she makes lead him/her to greater accuracy, quickness, sharpened attending, and more insight.

If he/she no longer adheres to the idea of the task, he/she can become extremely uncertain, because then he/she no longer always understands the purpose of the task.

With respect to the building activity itself, attention should be paid to the following: Does he/she repeatedly put the corner blocks on the middle block? How quickly does he/she discover that the side blocks can be put only on the middle block? Is he/she aware that the flat sides can only be on the outside? Does he/she turn the blocks so they don't fit? Does he/she look for correspondences with the sawed (wiggly) cuts? (see 95, 61; 174, 104). In addition, it is noticed if he/she involves him/herself with building layers instead of building the whole block, and if, perhaps, he/she only tries to join isolated blocks with each other, i.e., how readily he/she loses sight of the real aim, in contrast to where he/she first builds a stratum as an integral part of the whole. Thus, it is important to evaluate each action in the light of the ultimate aim.

In addition to these few media discussed, there are also some designed to gauge the state of actualizing the modes of specific aspects of the psychic life, such as perceiving, sensory perception, and motor skills.

## **6. FORM AND PATTERN MEDIA**

### **6.1 Form Boards**

Usually, these media consist of rectangular boards in which different figures are cutout. The child is asked to put the cutout figures back in the board. There are boards from which simple figures have been cut, such as a circle, square, rectangle, triangle, star, etc. Most of the form boards are produced by Stoelting of Chicago.

Also, the child can feel forms without seeing them, and then be asked to draw them. Included, here are also a great number of jigsaw puzzles, where he/she must construct a whole from various parts.

### **6.2 The tactile-motor medium of Werner and Strauss (319, 244-245)**

This medium consists of two sets of boards. One set consists of three boards on which the background is formed by rows of ordinary nails. Three figures (a square, an oval and a triangle) are introduced into this background with oval-shaped tacks (somewhat larger than the nails). The second set consists of three boards of the same figures that are introduced in solid forms on a smooth wooden background.

With respect to both sets, each board is presented to the child so that the figure is away from him/her and out of his/her line of sight while he is asked to touch the surface of each board with his/her fingers as long as he/she want to and then draw a picture of what he/she has felt.

Regarding the first-mentioned set, Werner and Strauss have found that brain-damaged children very easily become confused by the diffuse background while the background presents no problem for the non-brain-damaged child and the forms are easily distinguished (see 319, 244-245).

### **6.3 The alabaster board of Strauss and Lethinen (249, 31 et seq.)**

This medium is implemented to determine if the child is able to fathom the structure of a form. It consists of two identical square cardboard boards approximately 11 inches square. Each board has ten rows with ten holes (4/10 inch in diameter) in each row. The interval between holes from midpoint to midpoint is one inch.

There are 50 black and 30 red alabasters with which the investigator constructs patterns on one board which the child must reconstruct exactly on the other board (see 249, 32). After the child has reconstructed a pattern, he/she also is asked to draw it. Here, special attention is given to the direction in which he/she draws the lines. According to Strauss and Lethinen (249, 33), there are usually one of three approaches by the child noted during his/her involvement with the task:

- a) An orderly and successive way, where the alabasters are placed one after the other in a row. Usually, this occurs in younger children and intellectually retarded.
- b) A discontinuous and disconnected way which especially is a consequence of brain damage.
- c) A constructive method where the child goes to work in a systematic and planned way. This is usually encountered  
with children who possess good visual-motor abilities.

In addition, there are media directed to the functioning of different senses.

## **7. MEDIA FOR EVALUATING SENSORY PERCEPTION**

### **7.1 Visual perception**

A variety of media are available for evaluating the child's visual perception. As examples, the following are mentioned: Eisensen medium (58), Color sorting medium of Goldstein and Gelb (72), the Benton medium for visual retention (17), the Goldstein and Scheerer Stick medium (73), Ellis Visual design, Vedder-figures, Graham-Kendall Memory for design medium (78), Bannatyne Visuo-spatial memory test (8, 599; 9, 47), Benton Test of Retention (17), Frostig Test of Visual perception (67; 68), Haworth's Primary Visual

Motor Test (83), Beery's Developmental Test of Visual Motor Integration (10), Ayres Southern California figure-Ground Visual Perception Test (6), Witkin's Embedded Figures Test (320), Hooper's Visual Organization Test (920 and the well-known Bender-Gestalt medium (16).

Some remarks are made about the last-mentioned medium, also to illustrate the usefulness of the other media mentioned.

In building on Gestalt theory, Wertheimer (see 16, 3, 4) designed figures of little stars, circles, and lines to research the visual perception of gestalts (forms). With reference to these designs, Lauretta Bender assembled the Bender Gestalt medium (16). It consists of nine figures drawn on an individual card, and is qualified as a **visual-motor** medium because the child must **copy** the figure, he/she **sees**.

Elizabeth Koppitz (140) shows how the state of a child's visual-motor perception can be determined with the help of this medium, and how indications can be found regarding his/her school readiness, cognitive potential, and the possible presence of learning problems, brain damage, etc.

Thus, e.g., an indication of possible minimal brain dysfunction can be manifested when the following tendencies arise with respect to the child's copied figures (see 104, 70-95):

- a) Extra angles (corners) are added or some angles are missing;
- b) angles in place of curves;
- c) straight lines in place of curves;
- d) disproportionate subparts;
- e) substitution of stars with circles;
- f) rotation of design by 45 degrees;
- g) subparts not integrated;
- h) circles are left out or added;
- i) distortion of the design;
- j) lines in place of stars; and
- k) perseverations.

Regarding the child's involvement, the following actions, which indicate possible minimal brain dysfunction, also can be observed (see 104, 70-95):

- a) Each time, the figure is first traced with the finger before it is copied;
- b) the finger serves as a base with each new part that will be copied;
- c) after a few glances, the card is readily put aside and memory is relied on and it seems as if the child appears to be confused by the card and then avoids looking at it again;
- d) the card or drawing paper are rotated;
- e) the drawings are impulsive and hasty, there are many erasures, and great effort redrawing without any real improvement; and
- f) the child takes particularly long to complete the task since parts instead of the whole are the point of departure.

## 7.2 Auditory perception

This matter is often ignored during the investigation, even though several simple media are available by which an indication can be gotten of the child's auditory perception (see 317). These media are especially designed to discover hardness of hearing in younger children (see 54, 51) such as the **Listening** medium of Van der Horst (276), the **Auditory Discrimination Test** of Wepman (317), the **Investigation of Auditory Discrimination** test of Crul-Peters (192), and the **Auditory Analysis and Synthesis Test** of Rispens (209, 128 et seq.). Regarding the orthopedagogic evaluative investigation, use can be made of **whisper speech**, and of pairs of words whose pronunciations are very similar to each other. The child is asked to repeat the words after they are said to him/her loudly and clearly, while the investigator's mouth is out of his/her sight. The following are some examples: cat, cap; pork, cork; pat, pet; pen, pin' shake, shape; web, wed; tall, tell, moon, noon.

In addition, the child can be asked to repeat rhythmic patterns that the investigator taps out on the table with a pencil, while the child's eyes are closed.

## 8. DEXTERITY MEDIA

Various media also are available by which one can get an indication of the child's dexterity, such as, e.g., taking out blocks and putting them back in the correct places, turning a screw, putting pins in little holes, etc. (see 110, 86; 77, 74). There is special attention



given to the quality of his/her motor activities in terms of the ways he/she acts and the nature of the errors he/she makes.

## **9. MEDIA FOR EVALUATING SPATIAL ORIENTATION, SENSE OF DIRECTION, AND DOMINANCE**

### **9.1 Introduction**

As the center of the child's actualizing his/her psychic life, his/her body also is the point of departure for his/her spatial orientation, and sense of direction. The things outside his/her body are spatially **ordered**, and are brought into orderly relationships through perceiving from one's body-ness. Thus, e.g., the direction of things in space is determined by visual perception (see 187, 187; 77, 75).

Effective spatial orientation, and a sense of direction require a sufficient left-right orientation. Especially with children with specific learning difficulties, Olivier (187, 188) finds that their left-right orientation often is still not properly differentiated, and that cross-dominance (i.e., right-eyed, and left-handed, or the other way) often is present. Various other researchers (82, 3; 251, 48, 55-56; 321, 108-111; 168, 2, 33-34) have found a high correlation between dominance disturbances, or confusions, and learning problems.

### **9.2 Exploring left- or right-handedness**

The attention of the investigator usually makes implementing media for determining handedness superfluous. While the child is involved in the performance media, and when he/she writes, attention is given to which hand is given preference or used. When he/she writes or draws, attention also is paid to the slant of the paper. With a right-handed person, the paper slants to the left and for the left-hander to the right.

However, he/she also can be asked to carry out specific activities, and movements where he/she must use his/her hands. Thus, he/she can be asked to throw a ball, to catch it, or pick it up with one hand; to cut with scissors, to put an alabaster (marble) in a hole on a board, put pins back in a small box, etc.

If the child gives preference to his/her left hand, and performs better with it, this indicates an original left-handedness. However,

better performance with the right hand does not necessarily indicate an original right-handedness, because he/she grows up in a right-handed world, and is encouraged to give preference to his/her right hand. Therefore, it is important to determine if the same preference also is given to the use of the feet. Let him/her stand on one foot, kick a ball, hop on one leg. The leg to which he/she gives preference, usually is that which originally is the dominant one.

### 9.3 Exploring right- or left-eyedness

The child can be asked to make a circle with his/her thumb and forefinger, to close one eye, and with the open eye, to aim through the circle at an object held by the investigator. Ordinarily, he/she will form the circle with his/her dominant hand and aim with his/her dominant eye.

Also, an ordinary sheet of paper can be taken, and a small hole of approximately 2 inches cut out of the middle. Let him/her stand about 10 feet away, and ask him/her to hold the paper at arm's length in front of him/her, and ask him/her to aim through the hole, with both eyes open, at a pencil that the investigator holds vertically. Then, he/she must slowly move the paper toward his/her eyes. The investigator can see at once the child's dominant eye through the hole, and he/she will also move the hole to his/her dominant eye (see 40, 94-95). Notwithstanding the media described by Kahn and Griffin (96, 68), which can be used in this regard, the **ABC Vision Test** (160) also is mentioned (see also 82).

### 9.4 Exploring the child's bodily orientation and sense of direction

This has to do with the orientation of one's own body, as well as the orientation of another person's body.

Let the child alternately touch with his/her right and left hands, his/her right ear, his/her left ear, left eye, and also other parts of the body, such as his/her shoulders, knees etc. Following this, while the investigator stands in front of and facing him/her, he/she can be asked to indicate where the investigator's left ear, right leg, etc. is.

Many additional variations can be thought of by the investigator for gauging the child's confidence regarding concepts such as **above**, **under**, **behind**, **in front of** with reference to him/herself. Here, it

can only be mentioned that, regarding cross reference to the parts of his/her own body, usually he/she is not able to do so before seven years; and with respect to right and left references to the parts of another person's body, he/she doesn't succeed before 10 years (see 40, 96 et seq.).

## 9.5 Exploring the child's motor skills

Exploring the child's motor skills is important because they are closely related to perceiving. Inadequate motor skills usually lead to a defective spatial orientation, and the under actualization of personal potentialities. For these reasons, the motor skills should not be isolated as independent entities (see 77, 71-72).

There are **distinctions** made among fine motor, gross motor, eye-hand coordination, and eye movements.

Fine motor movement and coordination are preconditions for several skills, such as, e.g., writing clearly. Therefore, good handwriting as such, also is evidence of good fine motor movements. Several actions can be assigned to the child to evaluate his/her fine motor skills such as cutting out a small picture with scissors, coloring in a picture, copying a little picture through transparent paper, running a string through some colored stars, opening a book's pages one by one, tying his/her own shoelaces, etc.

Usually, a loss of the child's gross motor skills is conspicuous in his/her bodily attitude and movement. With the aim of closer investigation, he/she also is asked, among other things, to walk a straight line; to hop on one leg without losing his/her balance; walk heel to toe; stand on one leg for at least 20 seconds while holding his/her arms stretched in front of him/her; balance him/herself on a balance beam (see 187, 190).

Regarding his/her eye-hand coordination, he/she can be asked to catch a ball with one or both hands and observe whether his/her eyes "follow" the ball while it moves **slowly** in his/her direction; to catch a ball directly in front, to the right or left of him/her, etc.

Because smooth, regular **eye movements** from left to right, from up to down, and in a circle along with a broad eye span are necessary to learn to read easily, and to also master other learning

proficiencies, it also is necessary to determine their state with the child.

With the help of a round, shining small ball on the end of a thin small rod, the child's eye movements can be observed. The ball is held approximately one foot, at eye level, directly in front of him/her, and then slowly moved approximately one foot from left to right. It is noted whether his/her eyes follow the ball in one smooth, flowing movement, and if there perhaps is not a "flicker" when his/her eyes cross the midline of his/her body.

The ball should also be moved in a circle from left to right and right to left in front of his/her eyes, and it must be determined whether his/her eyes follow it in a smooth, flowing movement or in jerky movements. In addition, the ball is moved nearer to and farther from him/her at the midline between his eyes to see if they turn in and out (see 187, 191). Olivier (187, 191) has found that children with specific learning problems cannot properly carry out these activities.