

# Form-colour preference test (FCPT) # 52096 and # 52099

# Test cards for determining visual interest in subjects with impaired vision and perceptual problems

### **Materials**

**48 test cards** per set comprising of:

forms: face, dot (2 sizes), concentric circles, stripes, chess board, zigzags, blank card; colours: white, yellow, orange, red, pink, green;

1 manual, 1 sample recording sheet for documentation and printing.

The form-colour preference test is available in two complementary versions. One with black figures and frames on neon-coloured backgrounds (# 52096), and the other with coloured figures and frames on a white background (# 52099).

Specifically version II (# 52099) can be used for additional differentiated testing and therapy. Both test versions can also be used independently.

# **Principle of form-colour preference cards**

Underlying the form-colour preference cards is the assumption that every person preferentially looks at things that arouse his/her visual interest, rather than at less interesting objects (Preferential Looking principle).

The test originated from pedagogic experience with visually impaired people and has been used for about ten years at Nikolauspflege Stuttgart, Germany. The motif selection of the test cards is based on the fact that in seeing there is essentially greater visual interest in stripes, dots, faces and concentric circles (called elemental forms) and in bright colours. This can also be demonstrated by Preferential Looking.

**Research:** based on the pioneering work by Hubel/Wiesel, 1960 (Nobel Prize 1982) & other neuroscientists in the 1970s and 1980s

**Literature (selection):** Tanaka, Kortikales Verzeichnis der Elementarformen in: Stanislas Dehaene, LESEN: Die größte Erfindung der Menschheit, Knaus Verlag 2009; Donald D. Hoffmann, Visuelle Intelligenz, Klett-Cotta Verlag 2003

### **Objective of the test**

The goal of the test is to determine the preferred visual interest in visually impaired people when conventional vision tests fail to demonstrate a meaningful visual response. The result cannot be used as a visual acuity test, but the dot card allows examination in the sense of a visual acuity equivalent by size of the dot. The test results provide important information for preparation of suitable support material and appropriate design of the environment in order to provide a good vision support service.



# **Target group**

- Patients with congenital or acquired visual impairment & perceptual and communication disorders
- Suitable for children over six months old

### **Preparation**

To achieve best possible results the following points should be noted:

- The testing environment should be low in surrounding stimuli (visual and acoustic).
   The examiner should wear inconspicuous clothing, so as not to distract from the test cards.
  - The subject should be placed in a comfortable position for examination (e.g. assistance with head control).
  - When positioning the subject direct eye contact with the ceiling lighting should be avoided.
  - Uniform glare-free lighting is essential to avoid glare and reflections.

#### **Test procedure**

Two cards are presented side by side horizontally or vertically as required in the subject's visual field at a distance of 30 cm. If needed, the distance can be changed but should be recorded. The cards are presented in alternating directions, making sure that both cards are presented simultaneously.

Various responses possible from the subject:

- spontaneous fixation of one of the cards
- constant change in fixation movements
- fixation of a card, view remains "stuck" on one card
- spontaneous reaching for a particular card

#### Note:

The attention span of children and adults with perceptual and communication disorders is often limited. Therefore the examination can be performed in several, short sequences as well as with fewer cards. A flexible approach is recommended to take account of the individual needs and ability of the subject and the specific objectives of the test.

### **Example of the procedure**

To determine colour preference, select and present the following two cards simultaneously: Blank white card and blank pink card, followed by blank white card and blank yellow card etc. Visual interest is noted e.g. with the yellow card.

In the next step, form preference can be checked by showing the blank yellow card simultaneously with a yellow form card (face, stripes,).



# Variety of preferences:

- Preference of form vs colour:
   Black and white form card compared to coloured blank card
- Preference of colour with the form identical:
   Comparing two different colours of the same form
- Preference of form with the colour identical:
   Presenting two different forms of the same colour

Using the above information, examination in detail can be conducted as follows:

1) Subject tends to prefer a specific form – 2) Presentation of the preferred form in different colours -3) Comparisons of the preferred form on a coloured background with the coloured form on a white background.

It is helpful to note the observations on a recording sheet. Here the sign > can be used for documenting difference in the degree of visual interest.

# **Examples of colour preference:**

Colour blank card	Visual interest	Colour blank card
Yellow	>	White
Yellow	>	Orange
Yellow	>	Green
Yellow	>	Pink
Yellow	>	Red

# **Examples of form preference:**

Form card	Visual interest	Form card
White chess board	>	White stripes
White chess board	<	White dot
White chess board	<	White face
White chess board	<	White concentric circles
White chess board	>	White zigzag

# **Examples of detailed examination:**

Form + colour	Visual interest	Form + colour
Yellow face	>	Yellow stripes
Yellow face	>>	Yellow dot
Yellow face	>	Yellow chess board
Yellow face	>>	Yellow concentric circles
Yellow face	>	Yellow zigzag



## Test results in the example:

The visual interest shows preference for round forms and the colour yellow; the greatest visual interest is in a yellow face. For detailed examination now reactions to various yellow forms are tested.

# **Example for visual support:**

On the basis of the test results, support material and design of the environment consisting of round forms should be emphasised.

Here it is important not to exclude other shapes and colours so as to stimulate general visual interest development (implying: "There's still more to be seen").

#### Note:

Form-colour preference testing is based on the special needs education work under the German Federal Disability Equality Act (*Bundes-Behindertengleichstellungsgesetz*) – BGStG, 1<sup>st</sup> Section.

## **Excerpt from the text of the law:** Objective of the BGStG

§ 1 – The present Federal Act seeks to eliminate or prevent discrimination against persons with disabilities and thus to ensure equal participation of people with disabilities in social life and to enable them to lead a self-determined life.

#### **Test development:**

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