

The Tachistoscope

The **tachistoscope**, Greek = **swift viewer** (according to WEIS and STEINMETZ, 1995), is a special instrument with a laptop that displays images (**drug advertisements**) of at least the original size for a very short time (e.g. 1/1000s, 1/100s, 1/10s, 1s).

The most common model is the **projection tachistoscope**, which projects the slide onto a screen. This method makes it possible to gather information about the **genesis of the perception process**. It enables the researcher to establish which **elements are quickly recognised** and **arrest the viewer's attention**. The data produced in this manner are objective. Since the information yielded by the tachistoscope method is primarily used for **establishing attention values**, the viewer's cognitive and emotional perception reactions can be recorded additionally in an **interview or questionnaire** (e.g. **short questionnaire** and/or **polarity profile** after the tachistoscope test) such as:

- What impression did you gain from what you saw? (**emotional reaction**)
- What brand or product did you see? (**cognitive reaction**)

Tachistoscope studies belong to the actual genetic methods. The **basic assumption** is that no perceptions are formed "instantly", but are generated over a **very short period**. The **very first early impressions influence** subsequent perception (perception is similar to developing a film, first the dominant powerful objects, followed by the gentle impressions). This is achieved by controlled **complication of perception** (e.g. miniaturisation, peripheral perception, low lighting and **shortening time**). In the process, **only shortening time** with the tachistoscope has become **important for market research**.

Studies have shown that the **perception threshold** for individual perception of known objects varies widely. Below the perception threshold nothing is perceived at all. Above the threshold objects are identified. The initial information that influences the following perception process is transferred to the viewer just above the perception threshold.

This variable threshold has led to the situation in which **so-called subliminal advertising** cannot be put into practice. It is either subliminal for everybody and therefore invisible, or "supraliminal" for some and therefore identifiable.

Thus the **tachistoscope** is an excellent tool for investigating the following issues:

- Which spontaneous (false) impressions does the object (advertisement) create?
- Which design elements (in the advertisement) are recognised, and in what order?
- Is the statement conveyed by the graphic(s), text and the message (of the advertisement) comprehensible?

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Advertisement test – description of the method

Tachistoscope: individual projection

Rationale	<p>The contact time for an advertisement is usually very short. For instance, studies have revealed that the “blink of an eye” lasts about 1/10 second. Thus the advertisement must be recognisable - and its essential elements enter the consciousness - in a very short time. The tachistoscope variant “individual projection” measures which element of the advertisement is recognised in what time, and in what order the individual elements of the advertisement are perceived.</p>
Objective	<p>How quickly are the name of the preparation and the graphic recognised? In what order are the elements of the advertisement perceived (name, graphic, colour, texts, etc.)?</p>
Test design	<p>The single test advertisement is shown to the test subject (the doctor) as seven timed images using the tachistoscope (slide projection). The perception time increases incrementally at each of the seven projections:</p> <p>0.05 – 0.13 – 0.20 – 0.30 – 0.50 – 0.70 – 1.0 seconds.</p> <p>After each projection the test person (the doctor) writes down which new elements he saw.</p>
Assessment	<p>Graph of the perception process for the most important elements of the advertisement. Written summary of the results.</p>

Advertisement test – description of the method

Tachistoscope : competitive surroundings

Rationale	The advertisement must predominate over competing stimuli, i.e. it must have such attention intensity compared with editorial text and competing advertisements that it has an effect on the memory. The tachistoscope variant “competitive surroundings” measures how well an advertisement can draw attention to itself compared with rival adverts.
Objective	How well can the test advertisement assert itself against competitive surroundings of professional pharmaceutical adverts, how well can the design of the drug name draw attention to itself? Advertisements should bring over at least a certain amount of predefined information. It is particularly important as the anchor for this information that the drug name is clear from the advertisement. Both tachistoscope variants (single projection/competitive background) provide data on which information in the advertisement the test person (the doctor) uses.
Test design	The test advertisement is shown as one of a series of 10 consecutive current professional pharmaceutical ads. The perception time is divided up among five projections: 0.05 – 0.13 – 0.20 – 0.50 – 1.0 seconds. After each projection the test person (the doctor) writes down what he can remember about the advertisements, and which elements he saw.
Assessment	Graph of the mentions concerning the test advertisement compared with the competitive background. Written summary of the results.

Advertisement test – description of the method

Short questionnaire (after tachistoscope test)

Rationale	It is important for effective communication that the test subject (the doctor) has a positive attitude towards the advertisement and the statements. The short questionnaire records the attitude, the assessment, and the communication power of the advertisement.
Objective	How understandable, credible and interesting do the test subjects (the doctors) find the advertisement? What is the advertisement's core statement?
Test design	The test subject (the doctor) assesses the test advertisement after the tachistoscope test on the basis of a written interview. The test person (the doctor) can look at the full colour advertisement at any time during the interview. The questions concern comprehensibility, credibility, interest, attitude towards the advertisement, and the communication power.
Assessment	Graph of the responses to the individual questions, tables of the responses to the open questions. Written summary of the results.

Advertisement test – description of the method

Polarity profile (after tachistoscope test)

Rationale	In addition to its <u>content</u> , every communication also has a <u>relational aspect</u> . The relational aspect is of an emotional nature, it usually causes or alters emotions. The polarity profile (profile of characteristics) is used to record the emotional effect .
Objective	How does the advertisement act on the test subjects (doctors) emotionally?
Test design	After the tachistoscope test the test subject (the doctor) uses predefined paired characteristics to describe how he experienced the advertisement. This is an effective written method for recording the emotional effect of advertisements. Again, the test subject (the doctor) can look at the advertisement at any time during this step of the survey.
Assessment	Graph of the polarity profile. Written summary of the results.