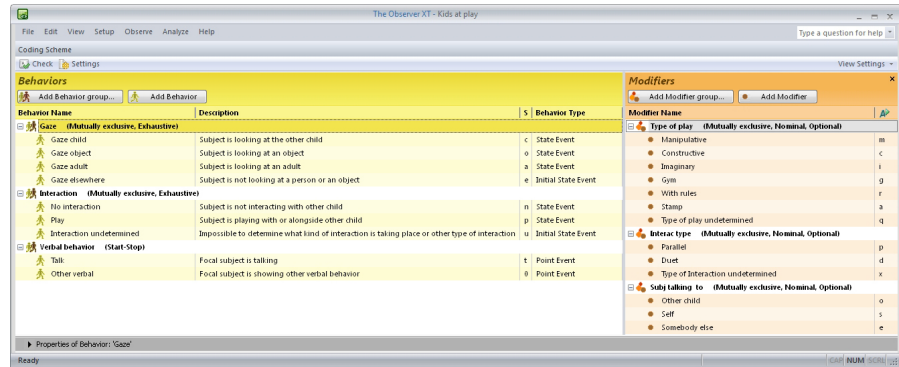


The coding scheme determines what data you collect and is, thus, an essential part of your behavioral study. Setting up a coding scheme is not as straightforward as it may seem. It often requires quite some thinking to define the perfect coding scheme.



In this white paper we will explain how to set up a coding scheme. Of course, you can set up your coding scheme on paper, but in this white paper we will use The Observer® XT software, a tool which can assist you in the entire workflow of an observational research project.

1

Set up a draft coding scheme or start with a template

As a behavioral researcher you will recognize the need for a well-defined coding scheme. In many cases your coding scheme is not perfect at the beginning. Some behaviors may be too detailed and others may be missing. The Observer XT software allows you to fine-tune your coding scheme while observing. You can add elements during scoring and afterwards reorganize your coding scheme and delete redundant elements. This means that you can start your observations with a draft coding scheme and develop and refine it to bring it to perfection. You can also decide to start your observation with a coding scheme from a template and adjust it so it fits your research needs. Researchers using The Observer XT software can download templates for free from <http://info.noldus.com/coding-scheme-exchange/>.

2

Specify your subjects, behaviors, and modifiers

In the coding scheme you can define your subjects and behaviors and use modifiers to specify your subjects and behaviors more precisely. Examples of modifiers are the number of words an infant utters when speaking or the person whom the focal subject is talking to. Modifiers can be nominal or numerical.

The order in which you score the coding scheme elements is not fixed. You can score your data in the order you prefer, instead of subject - behavior - behavior modifier, you can score, for instance, behavior - behavior modifier – subject. It is not mandatory to score all three elements, you can use any combination you like, for instance, score subjects and behaviors without modifiers or score behaviors only. In fact, you can also decide to score none of the usual elements (subjects, behaviors, and modifiers), but record comments only. You can start your study by registering comments, synchronized with video or in a live situation. Based on these comments you can make a draft coding scheme and use this to start scoring.

3

Define your behavior group

Depending on your research you may want to know the duration, frequency, and/or sequence of behavior. In The Observer XT you can define your behaviors as state or point events. State events have a duration, point events don't. Eye blinks for instance are often defined as point events because of a negligible duration. State events may be defined either as 'mutually exclusive' or 'start-stop'.

4

Mutually exclusive

Mutually exclusive means that you define a group of behaviors which exclude each other, for instance the behavioral group 'locomotion' with the behaviors 'standing' and 'walking'. The advantage of having mutually exclusive behaviors is that during coding you do not need to stop behaviors. When you start a new behavior, the previously coded behavior within the group automatically stops.

5

Start-stop

If you have to code behaviors that do not exclude each other, you may want to use start-stop behaviors (behaviors with a start code and a stop code). Setting up a coding scheme with start-stop behaviors requires little thinking. So, if you have rather simple coding work and you have little time to spend, start-stop behaviors may be a solution.

6

Point events

If you are not interested in the duration but only in the frequency of the behaviors that you score, you can define them as point events, for example blinking an eye. Because point events do not have a duration, they only have a start code, no stop code. Setting up a behavioral study with only point events is quite straightforward.

7

Coding from a diversity of sources

The Observer XT allows you to score from various sources. You can choose to score live, from one or more videos simultaneously. Live scoring has the advantage that you can see the context of the behavior that you score. Scoring video is practical when your coding scheme is more complex. You can playback the video as often and at the speed you like so you cannot miss anything. You can combine these two methods by first scoring live while a recording is made and coding the video in detail afterwards. When you use multiple media files (from multiple cameras) you have the opportunity to observe your subjects from different angles. The Observer XT even allows you to add behaviors or even complete behavioral groups while scoring. This allows you to begin your coding scheme with one behavior and add other behaviors during the observation.

The Observer XT coding and analysis software

The Observer XT supports the entire process of refining and re-arranging the coding scheme by allowing you to build your coding scheme during scoring. Also the possibilities to score subjects or comments only, make that you can arrange your coding scheme any way you like it. This flexibility is one of the key features of The Observer XT.