

Data Collection Worksheet

Please Note: The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

Summary of the Dimensional Change Card Sort (DCCS) Standard Version

The Dimensional Change Card Sort (DCCS) Standard Version makes use of two different styles of bivalent cards, displaying for example a red boat and blue rabbit.

The protocol consists of the following four steps:

1. The assessor decides which dimension (e.g., color or shape) on the bivalent cards will be used for the pre-switch phase of sorting.
2. The assessor sets up two sorting trays displaying target cards representing the two different styles of card. The participant is then given instructions for sorting a set of test cards, which displays the same images as the target cards, based on the dimension decided upon in step 1. The assessor guides the participant through the process of appropriately sorting one of each style of card.
3. The pre-switch phase of testing is carried out. The assessor instructs the participant to sort six randomly selected test cards based on the dimension selected in step 1.
4. The post-switch phase of testing is carried out. The assessor instructs the participant to sort six randomly selected test cards based on the other dimension.

Scoring

Typically, post-switch performance is only evaluated for participants who correctly sort five or more of the six pre-switch cards. Participants are scored as having passed or failed the task as scores are usually bimodally distributed between being all correct or all incorrect on post-switch trials. Participants who correctly sort five or more of the six post-switch cards are considered to have passed the task.

Most healthy three-year-old children fail the post-switch phase of the standard version of the DCCS, exhibiting inflexibility, while most healthy four- and five-year-old children pass as their flexibility increases.

Protocol source: <https://www.phenxtoolkit.org/protocols/view/530102>