

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 Dot Probe Task:

Each dot probe trial begins with the presentation of a central fixation cross (e.g., "+") for 500 milliseconds. The fixation cross is then replaced with two stimuli (e.g., words or faces) side by side on a computer screen. One of the stimuli is threat-related (e.g., the word "DEAD" or an angry face) and one is threat-neutral (e.g., the word "DATA" or a blank face). After 1,000 milliseconds, both stimuli are removed and a probe (e.g., ".", "*", or ":") is shown in the location of one of the stimuli. Participants indicate as quickly as possible which probe was shown. The participant's response clears the screen and the next trial begins 500 milliseconds later.

Participants are administered 152 trials. Incongruent trials are those in which the dot replaces the threat-related stimulus. Congruent trials are those in which the dot replaces the threat-neutral stimulus. Neutral trials are those in which the participant is presented with a neutral-neutral pair of stimuli.



Scoring:

Emotional bias scores can be calculated by subtracting response times to congruent stimuli (when probes replace neutral stimuli) from response times to incongruent stimuli (when probes replace threat-related stimuli). Emotion bias scores can be further divided into threat and happy bias scores. A positive score indicates bias away from that emotion, while a negative score indicates bias toward that emotion. Alternatively, a condition with neutral-neutral stimulus pairs can be used as the baseline. Doing so allows for disambiguation of attentional capture versus attentional disengagement.

Participants who respond more quickly on average when the probe replaces the threat-related stimuli demonstrate an attention bias toward threat. Participants who respond more quickly on average when the probe replaces the threat-neutral stimuli demonstrate attention avoidance toward threat.

Protocol source: https://www.phenxtoolkit.org/protocols/view/631001