

# Functional Gaze Control

## Plotting gaze control profiles



An effective way to summarise performance 'at a glance' is to present scores on a simple chart.

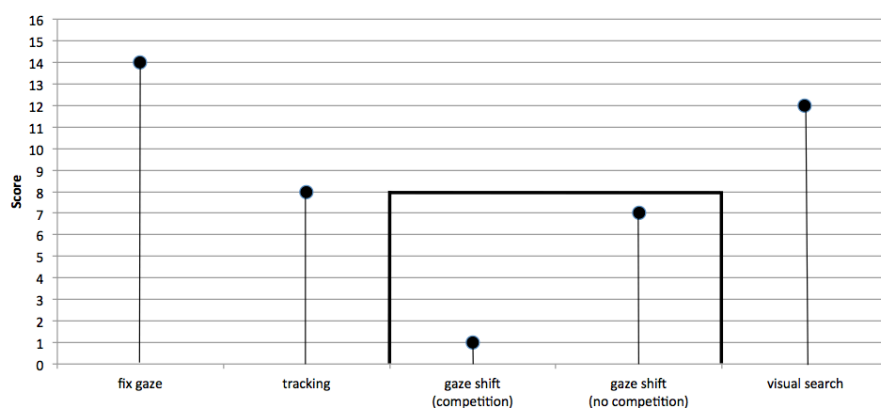
Figure 1 provides an example of overview performance relating to:

- gaze fixation
- tracking
- gaze shifting
- visual search.

The maximum possible score for gaze fixation, tracking and visual search is 16.

The maximum possible score for gaze shift is 8 for each condition (competition, no competition).

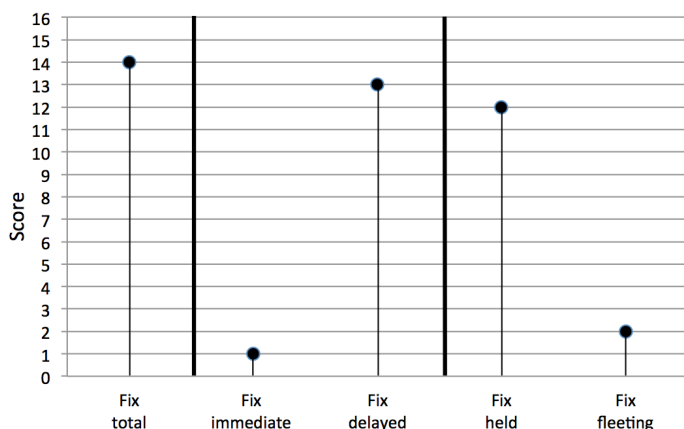
**Figure 1. Overall gaze control profile**



The scores here have been taken from the example score sheets shown in the *Guidance for running procedures* document. At a glance, this child performed less well in the tracking task compared with the other activities, although they did not gain a maximum score on any task. The child showed a particular strength in shifting gaze between targets in the *no competition* condition compared with the *competition* condition.

Performance on individual tasks can also be plotted on the charts provided. For example, figure 2 presents performance on the gaze fixation task.

**Figure 2. Gaze fixation profile**

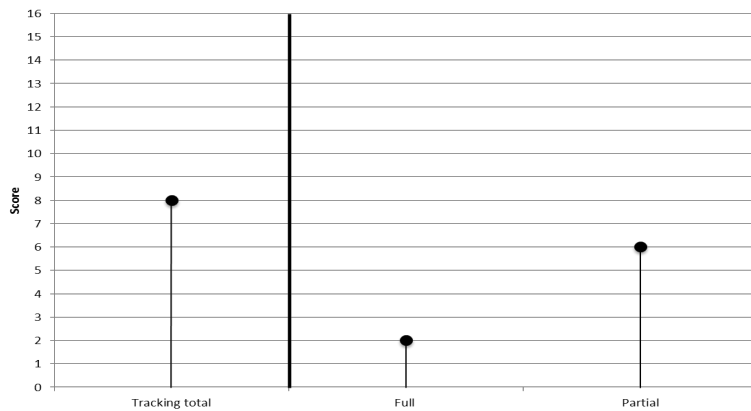


This child fixed gaze on the target 14 out of 16 times and for 13 of those occasions gaze fixation was judged as delayed. When fixation was achieved, it tended to be held on the target.

This work is supported by  
Sparks and the Rooney  
Foundation

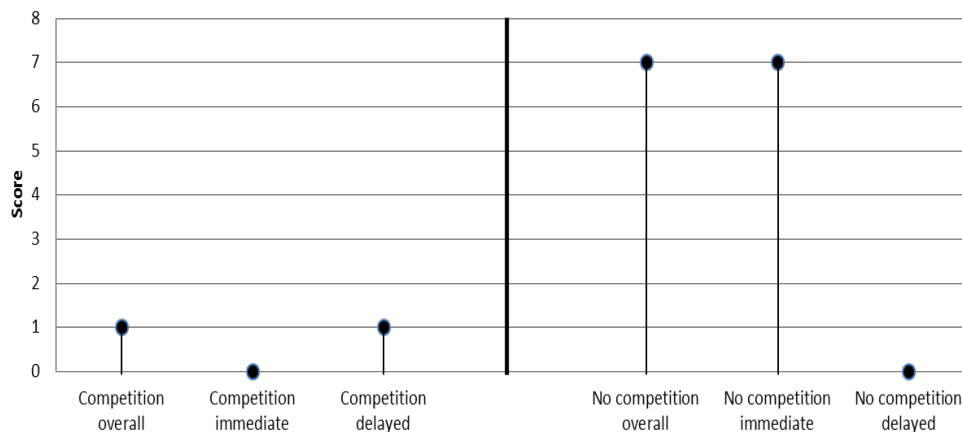
**Sparks**  
For children's health  
www.sparks.org.uk

Figure 3. Tracking profile



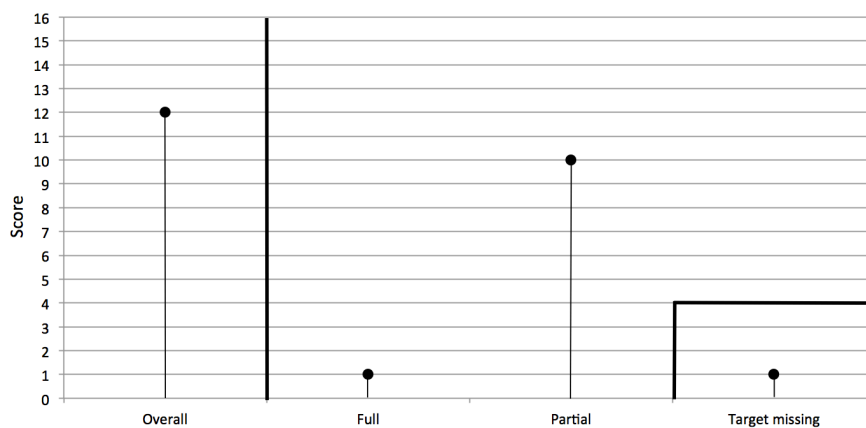
Here the child appears to have difficulty tracking the target, achieving some form of tracking only 8 times out of 16 trials. The child did demonstrate full tracking ability on two occasions, but more frequently tracking was partial.

Figure 4. Disengaging and shifting gaze



In this case, the child has disengaged and shifted gaze only once when the second target is presented in competition with the first target. The child's ability to disengage and shift gaze is notably better in the no competition condition.

Figure 5. Visual search



The child demonstrates limited ability to conduct a full search of the objects. The single occurrence of full searching was observed when the target object was missing. So while there is evidence of some searching skill this is not fully or spontaneously apparent.

**In summary**, the profile of performance provides insight into the child's strengths and difficulties within an overall profile of reduced gaze control skills.

**Relative strengths include:** Ability to fix and hold gaze, and disengage and shift gaze in a 'no competition' context.

**Relative difficulties include:** fixing gaze may take some time (delayed), following moving items can be difficult, disengaging from one item to look at another present object may be difficult (shifting gaze in competition condition, and search and selectively attending).

This important information will inform expectations and planning in relation to the child's use of gaze as a response modality in assessment as well as everyday interaction and learning.