

[Neuropsychologia](#). 2001;39(4):352-7.

## The gradient of visual attention in developmental dyslexia.

[Facoetti A](#)<sup>1</sup>, [Molteni M](#).

### Author information

### Abstract

This study investigated the gradient of visual attention in 21 children, 11 children with specific reading disorder (SRD) or dyslexia and 10 children with normal reading skills. We recorded reaction times (RTs) at the onset of a small point along the horizontal axis in the two visual fields. In 70% of the cases the target appeared inside a circle acting as focusing cue and in 30% of the cases it appeared outside, allowing us to study the distribution of attentional resources outside the selected area. Normally reading children showed a normal symmetric distribution of attention. Indeed, RTs were directly proportional to the eccentricity of the target, and no visual field effect was observable. In contrast, children with SRD showed an anomalous and asymmetric distribution. The effect of the target eccentricity influenced RTs only when the stimulus was projected in the left visual field, whereas no effect was observable when the stimulus was projected in the right visual field. Findings allowed us to discuss the relation between this anomalous spatial distribution of visual attentional resources and dyslexia. To interpret the visual perceptual difficulties of children with SRD the hypothesis was made of a selective disorder of spatial attention (left inattention and right over-distractibility) related to a right parietal cortex dysfunction.

PMID: 11164873 [PubMed - indexed for MEDLINE]