

Visual Processing Skills

What are they?

- ❖ Visual skills "...are the most basic functional skills necessary for the development and management of all visual perception and visual motor activities, and they must be intact for a person to receive, process, interpret, and respond appropriately to input from the environment" (Waisia, 2004, as cited in Zoltan, 2007).
- ❖ Visual processing skills allow an individual to quickly gather information and details from the environment, allowing for quick decision making and the ability to adapt (Warren, 1996, as cited in Zoltan, 2007).
- ❖ Eight types of visual processing challenges exist including issues with visual discrimination, visual figure-ground discrimination, visual sequencing, visual-motor processing, long- and short-term visual memory, visual-spatial, visual closure, and letter and symbol reversals (St. Louis Learning Disabilities Association, 2021).
- ❖ For more information on visual processing deficits, you can visit the following websites:
 - Kars 4 Kids - <https://parenting.kars4kids.org/visual-processing-disorder-is-this-what-your-child-has/>
 - Churchill Center & School - <https://www.churchillstl.org/learning-disability-resources/visual-processing-disorder/>
 - St. Louis Learning Disabilities Association (LDA) - <https://ldastl.org/about/visual-processing-disorder/>

What are the signs of visual processing deficits?

- ❖ Difficulties with visual processing may appear differently depending on the child, but common signs may include (but are not limited to), misreading letters, numbers, and words, difficulty focusing/inattentiveness when presented with information visually, difficulty with writing legibility and/or staying within margins/lines, and complaints of eye strains/rubbing eyes (St. Louis Learning Disabilities Association, 2021).
- ❖ In addition, individuals with visual processing deficits may experience difficulties using visual feedback to coordinate body movements, difficulties with determining how far apart or far away objects are, and difficulty recalling information that has been presented (St. Louis Learning Disabilities Association, 2021).

How can visual processing deficits impact occupational performance?

- ❖ Visual deficits can impact essentially all aspects of a child's functioning and performance in occupations.
- ❖ Visual deficits can negatively impact one's participation and performance in ADLs (i.e., dressing, toileting, etc.), reading, driving, and activities requiring hand-eye coordination (Hellerstein & Freed, 1994, as cited in Zoltan, 2007).
- ❖ Visual deficits may interfere with a child's ability to learn to read, write, and play (Scheiman, 2011).
- ❖ Visual problems can also negatively impact social interaction as interactions often involve nonverbal communication that relies on recognizing facial cues and body language (Scheiman, 2011).

How can OTs help?

- ❖ Depending on the child's needs, an OT may work to promote independence and participation in occupations by:
 - Conducting visual screenings to identify how visual impairments may be impacting functional independence
 - Providing referrals for the child to see an eye specialist for further evaluation, if necessary
 - Designing and using occupation-based play and functional activities incorporating visual scanning, tracking, and convergence
 - Educating on and using adaptive strategies (i.e., using anchoring techniques and/or magnifiers for reading, using bold lined paper and/or bold tip pens/markers for writing activities, etc.)
 - Adapting tasks and/or environments (ex. using enlarged print when possible/purchasing objects with large-print, adjust lighting as needed, using bright tape on stairs and/or food/medication labels, using opposing colors for better contrast, placing needed items in the client's field of vision, etc.)
 - Providing parent and caregiver education

Information above is not comprehensive and all treatment plans are specific to and depend on the needs of the child and are in no way limited to the examples provided above

References

- Scheiman, M. (2011). *Understanding and managing vision deficits: A guide for occupational therapists* (3rd ed.). SLACK Incorporated.
- St. Louis Learning Disabilities Association. (2021). *Visual processing disorder*. <https://ldastl.org/about/visual-processing-disorder/>
- Zoltan, B. (2007). *Vision, perception, and cognition: A manual for the evaluation and treatment of the adult with acquired brain injury* (4th ed.). SLACK Incorporated.