

Home strategies for 4-8 year-old child: from visual skills inventory

Case Study 9: LAURA

The following strategies are suggestions to try out for some of the identified problem areas, for your child at school and at home.

It is important to remember that what works for one person may not work for others and that if a strategy works well initially it may not last and may require to be adapted or changed in the future.

It is important to prioritise a few problem areas and implement one or two strategies. Trying to tackle all areas of difficulty and implement all solutions at one time can result in overload and ultimately will not be beneficial.

The following information outlines some of the key areas of difficulty identified from the clinical structured history taking questionnaire and some of the strategies which may be effective for each problem.

Impaired visual field or visual perception affecting vision affecting movement

Difficulties in this area can be due to impairment in the visual field especially lower visual field or left/ right visual fields.

Difficulties in this area can also be due to difficulty with depth perception resulting in problems seeing and adjusting to uneven surfaces, changes in the floor surfaces, edges of pavements or kerbs, or the ability to see objects on the floor surface if it is patterned or cluttered. The child therefore does not adjust their movements accordingly and is increasingly likely to hesitate, stumble, trip or fall.

1. Trip over toys and obstacles on the floor

Strategies to try

- Keep floor surfaces clear
- Try using a scooter, pram or wheeled toy to push to provide additional input about the surface and to increase stability and provides tactile guidance about the height of the ground ahead and reinforces the efference copy map. (The brain's ability to locate items when assisted by touch)

- Try using a stick (hockey stick , self selected stick from the park) to help guide around obstacles
- Use additional supports to negotiate obstacles i.e. wall, adult.
- Try plain floor surfaces i.e. plain carpets, laminate floors to highlight contrast.
- Develop good storage systems and routines to avoid clutter and obstacles on the floor.
- Develop coordination and balance skills through physical activities and games. i.e. obstacle courses in park, house, garden, riding, swimming, trampolining

12. Bumps into door frames or partly open doors

Strategies to try

- Highlight door frames in a contrasting colour
- Replace doors with beaded curtains
- Give additional time to become familiar with a new environment, arrive early to explore.
- Use contrasts in colour and brightness of walls and floors to emphasise where they start and finish.
- Paint skirting boards and door frames a contrasting colour from walls and floor to facilitate it standing out.

Difficulties showing evidence of impaired perception of movement

These difficulties indicate that there is a problem with the information being received and processed when the eyes move or when objects in the environment move. The individual may misjudge their own movements through space but may also demonstrate fear or panic if they are surprised by moving objects approaching them unexpectedly. For example, children in playground, dog in the park, a car: as they will not have tracked or seen the object move.

15. Has difficulty seeing things which are moving quickly, such as small animals, other children, or liquid filling a cup.

Strategies to try

- Give additional verbal information “your friend Jenny is coming towards you in a pink jacket”
- Ensure friends and teachers introduce themselves if approaching in a busy areas where there is a lot of movement
- Ensure additional assistance both verbal and physical is offered to help find friends/ family in busy places i.e. playground.
- Encourage child to rely on voice recognition to locate friends and family.
- Teach child to track by using exaggerated head movements.

When filling cups, or pouring

- Try using a clear plastic cup- this can be marked with nail polish to indicate the full level.
- Learn to fill cup half full and count seconds while liquid is pouring having had supervised practice regarding the counting time.
- Try using a fluid indicator.
- Teach child to listen to the pitch as the cup/glass is filled. A cup filling will emit a higher pitch as it is filled.

16. Avoids watching fast moving TV

Strategies to try

- Vary size of screen to suit the child’s scanning capacity.
- Sit close to the TV to minimise other visual distractions.
- Minimise the visual distractions around the TV. i.e. photos, pictures, patterned wall coverings.
- Generally older films (pre 1970) e.g. Wizard of Oz have less sophisticated graphics and camera movements and zoom photography and will be slower moving and therefore more easily seen.

17. Chooses to watch slow moving TV

Strategies to try

- Generally older films (pre 1970) e.g. Wizard of Oz have less sophisticated graphics and camera movements, and zoom photography and will be slower moving and therefore more easily seen.
- Find programmes where the presenter sits or stands still (children's news, weather)

18. Has difficulty catching a ball

Strategies to try

- Practice catching skills using a balloon which will move more slowly.
- Try filling the balloon with rice / water to give additional sound clues.
- Try using large brightly coloured balls
- Try using balls with sound or light effects.

Difficulty interpreting a complex visual scene and making sense of the information if there too much visual information present

This can be due to the overwhelming visual impact of too much information being presented at the one time. Difficulty searching for and locating specific items, people, or places can also depend on the amount of visual information, the additional movement visible and the orientation and view of the object.

Poor visual memory and the ability to retain information presented visually may also impact on performance.

Orientation of self around the environment is also a challenge especially if there is a lot of visual information to interpret and to process.

19. Has difficulty seeing something which is pointed out in the distance

Strategies to try

- Play eye spy games encouraging the child to select a distant object and give clues about it so that others have to find and identify.
- Train to regularly scan the visual scene and describe what they can see.
- Give extra time to process information and do not rush on too quickly.
- Take child to the item to view at a closer proximity.

20. Has difficulty finding a close friend or relative who is standing in a group. i.e. Mum at school gate, friend in the playground, Dad at a party.

Strategies to try

- Give additional verbal cues e.g. mum calls out name to allow voice recognition to assist with visual scanning
- Have a pre determined meeting place so that the child knows where to look for person
- Ensure “pop out” visible and easily identifiable clothing is worn i.e. a bright pink jumper, a luminous jacket. This item must be worn so that it is visible from all angles. i.e. a jumper, not a badge. The child should be aware of this.
- Encourage the use of voice recognition skills
- Encourage child to shout/call for the person
- Ensure close family friends use non-verbal signs which are easily visible to help them be located i.e. waving

- Team sports are likely to be difficult for the child as they will not necessarily be able to find their team members especially if there are a lot of people and everyone is moving

21. Has difficulty finding an item they want if there is too much visual information i.e. biscuits in the cupboard, toy in a box/shelf.

Strategies to try

- Set up an area in the individual's room for storage of important items i.e. bedside table with storage box, plate.
- Reduce the amount of visual information available i.e. the number of toys in a toy box, the number of items on a shelf.

22. Get lost in places where there is a lot to see e.g. a crowded shop. (may also refuse to leave parents side for fear of getting lost)

Strategies to try

- Have a pre arranged meeting point in case of getting lost.
- Ensure child always stays close to the adult they are with, or always knows where the adult will be – the adult may have to stand in an agreed position to allow the child to instantly be able to locate them.
- Practice to develop familiarity and consistency

23. Gets lost in places which are well known and which are new.

Strategies to try

- Try using coloured markers on the floor i.e. circles, foot print shapes to help with route finding.
- Encourage the use of land markers – pictures, photographs on the wall, counting doors with a memory map.
- Use mnemonic memory strategies to help route finding by recounting landmarks.
- Encourage child to shout/call for the person
- Ensure close family friends use non-verbal signs which are easily visible to help them be located i.e. waving.
- Memorise route instructions setting them to a rhythm or music

24. Has difficulty locating an item of clothing in a pile of clothes, a drawer or a wardrobe.

Strategies to try

- Minimise clothes in the drawer or cupboard i.e. socks only
- Experiment with storage styles and layout e.g. vertical / horizontal
- Try hanging clothes by outfit rather than items
- Spotlight key areas in room i.e. above drawers
- Involve child in storage and organisation
- Lay out clothes the night before
- Hang clothes rather than fold them
- Try an elevated shoe rack
- Practice dressing skills a little at a time with help at the start of a garment and then child completes the last bit.

25. Has difficulty selecting a chosen toy in a toy box, books on a shelf.

Strategies to try

- Minimise the number of items in toy boxes, shelves and cupboards.
- Minimise number of items on desk, in pencil case, in school bag.
- Use transparent containers, pencil case, school bag, storage boxes.
- Encourage child to return items to a set position.
- Organise storage system with clearly labelled drawers and boxes using pictures, photos, colours.
- Try plain backgrounds, bed spread, walls, carpets
- Have colour coded symbols on the walls or wall colours to indicate the area of the room i.e. toys- yellow , clothes – green

26. Sits closer to the television than about 30 cm. (NB this will not harm the child's vision)

Strategies to try

- Try a large screen TV
- Try a flat screen TV
- Try smaller TV if a large screen offers too much of a demand for scanning.
- Avoid visual clutter between seats and TV
- Avoid visual clutter i.e. photos, plants beside or above the TV

- Join film club/book club to obtain access to older slower moving films which have fewer visual effects.

Impairment of visually guided movement of the body and further evidence of visual field impairment

Difficulties may be impacted by visual field and may need retraining to adjust head position. Difficulties may also be related to perception of depth and judgement.

28. Holds on to your clothes tugging down when walking.

Strategies to try

- Try offering a straight arm for child to hold onto, which should be held slightly backwards, to give advance notice of height changes. This provides tactile information to child about the ground they are walking on.

29. Finds uneven ground difficult to walk on

Strategies to try

- Hold onto adults arm pulling down, adult should have a straight arm extended downwards.
- Give additional verbal reminders and instructions- you need to lift your feet higher here as the ground is bumpy
- Give additional reminders to change head position and look down.
- Use a physical aid to assist with balance and provide tactile input about the surface e.g. pram, wheeled toy, hockey stick, walking pole (this needs to be age appropriate and self selected).
- Ensure safe ground cover in outside areas frequently visited i.e. park, garden.
- Minimise height variations on floor surfaces.
- Try white trainers to increase visibility of the feet.
- Practice balance skills, i.e. horse riding, wobble boards, obstacle courses.

30. Bumps into low furniture such as a coffee table

Strategies to try

- Get child to help move furniture when it requires to be rearranged.
- Minimise the amount of furniture in each room thus maximising the space available for movement.
- Enhance colour contrast of furniture and floor
- Ensure that furniture purchased does not have glass or sharp edges
- Arrange room with space to move around if possible

- Make room trails or footprints on the floor to mark the way
- Consider the shape of the furniture and try to maximise floor space and movement areas.
- Use plain carpet and wall coverings to reduce the amount of visual information being presented.

33. Explores floor boundaries (line to carpet) with their foot before crossing the boundary.

Strategies to try

- Clearly mark floor boundaries, surface and height changes.
- Try pushing a wheeled toy, walking stick etc to assist with tactile feedback. This needs to be age appropriate and self selected.
- Ensure good lighting in areas with floor boundaries
- Try using plain colours of floor covering, avoiding patterns where possible.

34. Finds inside floor boundaries difficult to cross

Strategies to try

- Give additional physical support. i.e. arm, rail, wall.

34a. Finds new surfaces difficult to cross

Strategies to try

- Give additional physical support.
- Arrive early to practice and help to reinforce awareness of surface changes.
- Try pushing a wheeled object across floor boundaries

34b. Finds well known boundaries difficult to cross

Strategies to try

- Give additional verbal reminders. "the floor changes to carpet in 3 steps."
- Give additional physical support.
- Colour contrast floor boundaries and surface changes.
- Try pushing a wheeled object across floor boundaries.

Difficulties demonstrating impaired visual attention and fatigue which is likely to result in difficulties with tasks requiring sustained visual attention and concentration especially school work.

37. Finds it difficult to keep to task for more than 5 minutes.

Strategies to try

- Minimise visual distractions around the work area.
- Consider the need to minimise other distractions around the work area. i.e. sound , movement.
- Encourage short periods of focused attention.
- Time concentration span and work with minimum concentration time to build it up.
- Try using a sound or visual timer to set limits.
- Vary tasks and demands. i.e. seated , standing, moving, listening, talking, looking
- Give additional verbal reminders and encouragement. “you are doing well just 1 more minute”
- Try a fidget object to help with attention when using listening skills

38. Finds it difficult to get back on task when distracted

Strategies to try

- Minimise distractions around the work area.
- Present work tasks in short blocks breaking down activities.
- Present tasks one at a time.

39. Bumps into things when walking and having a conversation

Strategies to try

- Give additional verbal reminders. “there is a tree coming up in front of you”
- Encourage one task at a time i.e. walking or talking or listening
- Make only one demand at a time i.e. walk, talk, or listen.

40. Misses objects which are obvious because they are different from their back ground and seem to pop out e.g. a bright ball in the grass.

Strategies to try

- Reduce the amount of items presented.
- Space out items.
- Use contrasting colours of background and object i.e. plain floor, walls, bed spread.
- Maximise contrast and visibility to increase pop out effect.

Difficulties demonstrating evidence of behavioural difficulties associated with crowded environments i.e. cinema, shopping centre.

This may be due to too much visual and or auditory stimulation which can be overwhelming and stressful.

41. Demonstrates difficult behaviour in cluttered rooms

Strategies to try

- Minimise clutter, especially visual clutter i.e. photos on the wall.
- Provide a quiet area with less clutter and visual stimulation in house.
- Be pre warned to expect behaviour and take appropriate measures
- Try using plain flooring and wall coverings
- Try using plain fabric coverings on beds, seats etc.
- Clearly labelled, organised storage to reduce the amount of visual clutter around.
- Try smaller areas with less noise and visual information i.e., go to smaller shops.

43. Behaviour is difficult in a over stimulating or busy environment i.e. supermarket, shopping centre, assembly, dinner hall, playground

Strategies to try

- Try a tactile object to provide alternative sensory input i.e. fidget object, toy, rubber, giant paper clip
- Try oral sensory input i.e. chewing gum, mint, lemon, ice lolly
- Try scents on a hanky to provide additional sensory input.
- Try building up exposure and experience i.e. trips to small shops for one item. Get child to plan their own route for 1 or 2 items in the small shop first.
- Provide additional sensory input through deep muscle activities i.e. pushing trolley, carrying the basket.
- Encourage help and assistance i.e. while shopping to fetch items.
- Arrive early to give additional preparation time