Table 3 Observations of intervention for each participant

Participant: activity; (duration video recordings)	**Education and pre-task explanation**	**Environment and space**	**Instructions, cues and prompts and feedback during task performance**
P1: cooking breakfast (34 minutes)	**Pre task reminder of strategies to use** Therapist reminded participant of search strategies before the task began: *'Scan the environment to your left',* *'Think about making wide head turns towards affected side'* *'Turn your head so that seeing side captures what unseeing side misses',* *''Try making head and eye movements quicker'.* *'Try to look to the left side first'*	**Environmental reminder to look left** A4 poster of an eye with printed instruction '*Turn your head to the left'* placed in prominent position at eye level on a cupboard door situated in the right half of the wall above workspace No other environmental manipulation was made to the position of objects and utensils in the kitchen	**Cues and prompts** Therapist indicated poster prompt at start of task And gave physical prompt/demonstration: '*Look to this side* [moved her own hands and head in deliberate fashion to left] *and then scan to the right* [completed movement round to right side]'. Participant unable to locate which cooker knob to use for hob plate. Therapist used visual and verbal cue: pointing and '*It's this one'* Participant managed to the complete task without further spatial prompts. Other prompts were for task completion, not spatial attention: e.g. *What are you going to do next?* **Therapist feedback** – *'You are doing really well'*
P2: golf (total time on activity not recorded, video clips totalled 17 minutes)	**Alerting participant to new difficulties in task performance** Therapist highlighted how despite golf being a familiar task P2's performance was likely to be altered -'*You may find it more difficult to track the ball after you have hit it, and then to locate it. When you are looking for the ball after you have hit it you will need to search more to the left so turn your head to the left first as you walk down the fairway and make sweeping head movements.'*	**Landmarks used to aid searching** The therapist used landmarks in environment to instruct participant's search for the golf ball – '*if you look straight ahead can you see the red flag?* [Visual prompt: points to flag] '*Can you see the tennis courts, come back a little bit towards me, there's a white ball there*.'	**Instructions for making golf shot** The therapist instructed 'F*ollow the trajectory of the ball so that when you go to find it you're able to locate it easier'*. Therapist demonstrates head movement needed when taking a shot. She stands alongside P2 (to his unaffected side), turns to her right as if getting ready to hit the ball, then looks clearly to her left, in the direction of the next hole. At the same time she instructs, '*You need to look*'. **Feedback** After P2 had practiced the visual technique when hitting the golf ball, the therapist asks him to consider his performance: 'C*an you see how it has improved now?*' **Searching for the ball after the shot** Therapist responds to P2 searching to his right, when the golf ball is to his left, '*This is where you have difficulty, isn't it?' 'I want to reiterate to you because of the visual problems you have it's important you turn your head.*

			You're going to have to make sure you turn your head so it goes all the way over there [points]' Later, after a second ineffective search the therapist reminded P2, *'Keep checking and turning your head so you can see all the way over there.'* The therapist swept her hand round to illustrate the amplitude of movement needed for scanning to the left.
P3: therapeutic search activities (24 minutes)	**Reminder of the impact of field loss when moving around** The therapist reminds P3, '*Your particular problem is that you can't see to the lower left quadrant which makes moving around difficult particularly outside*' **Use of activity to explain scanning strategies and test vision when moving** Therapist uses room search tasks with laminated numbers on the floor to show P3 the effect of her field deficit. '*What these things do is make you aware you've got the problem so that when you're out and about it becomes automatic to think, Make sure that I pay more attention to the left so that I know that where I don't see so well, so that's where I need to slow down, take more time because there might be something there that I'm not aware of and also that I need to turn my head first.'* The therapist explained, *You need to speed up your scanning time to the side you don't see so well and you have to make a wider head turn. The brain finds it difficult to do that initially because it finds it easy to orientate itself to the side it can see. We have to re-educate it to looking more to the side you can't see to capture the whole picture and to speed it up, that is to make it become more automatic.'* *'The principle of what I'm going to try and teach you is that you need to speed up your*	***Manipulating area for attention*** 1. Room search while walking (15 minutes): Cards placed on the floor for participant to identify whilst walking. Number of cards increased and position varied on each trial. Later the activity was changed to use unfamiliar objects instead of the cards 2. Table top search (9 minutes): Increasing number of cards on table.	**In encouraging faster performance** when moving around The therapist encourages fast eye movements She says *'You're going to be almost trying to see it out of the corner of your eye.'* *Eventually you will get good enough so you can just use your eye movements.'* **Training increased amplitude of eye movements** During table top search for playing cards the therapist trains P3 to increase the amplitude of eye movements: Therapist asks: *'Tell me what you can see without moving your head.'* (P3 asks whether she should just move her eyes, but has difficulty doing eye movement without moving her head). Therapist demonstrates without moving her head and asks P3 if she's able to see how she is keeping her head still and using eye movements to locate cards. **Feedback** *'Just try and move your eyes over to the left; what can you see now?'* Therapist gave knowledge of results – *'You did make bigger eye movements?* *'Initially you said I can't see it, but when you moved your eyes a little bit more you could see a bit more of the whole picture'*

	scanning of the side you don't see so well, and you have to make a wider head turn.' **Informing participant of intended progression of therapy** P3 found the room search tasks fairly easy. Therapist and P3 discussed the familiarity of the home environment, explaining that she would progress to moving outside and in a supermarket to practice strategies learnt in this session at home. **Explaining need for active learning** When discussing reading being difficult P3 says, '*I thought I'd wait a bit, until it gets better,'* the therapist advises, *'You can do this, but any of these things will challenge the brain a little bit and get it into a good habit'.*		
P4: education, therapeutic search activities (53 minutes)	**Education about visual field loss and aims of Occupational Therapy intervention** (7 minutes) Therapist uses goggles with half of each lens occluded to explain hemianopia. Her explanation was extensive; excerpts are here: '*It's not the eyes that are the problem, it's the part of the brain that processes the images' …'You are missing part of what you see- half of what you see in each eye… which is why reading is difficult.'* Therapist explained that she would be trying to enable P4 to read by learning and practicing compensatory strategies so that the scanning becomes automatic. *'Make sure you use a wide head turn, and you need to make sure your seeing side is far enough round to capture the picture of your non-seeing side. Increase your head and eye movements towards the affected*	**Manipulation of area of space and number of items for attention** Table top space activities (35 minutes) - Playing cards on wheelchair table in an array. Position and number of cards varied. Participant asked to read across the line. Task was varied to identifying cards therapist called out (in non-sequential order). Therapist placed participants hand on the table in the blind field as an anchor for the end of the line of cards. **Reading with increased complexity**	**Explanation of activity** *'I'm going to use the cards to give you an idea of the principles I've been talking about'.* **Feedback** Knowledge of results given *'At the far side – if you turn your head you will see you've missed a card'* *'If you turn your head, can you see this card on the end?'* ***Explanation of using hand for anchoring*** *'Sometimes it can be useful to have your hand there…..* *'Remember you need a cue, like your hand, to orientate you back to where to start'* Occasionally therapist added a sensory prompt by stroking or holding the participant's hand (sometimes in concern that hand may fall off table edge) **Prompts** *'What does the letter at the beginning of the line say?'*

	side and make your head and eye movements quicker.' *'It's more automatic for your brain to want to look to the side it sees best so you have to work hard to override that'.* **Explaining difficulties in using a magnifying glass for reading** Before stroke P4 used a magnifying glass for reading crosswords. After trying it out therapist advised against using the magnifier because of the added difficulty with finding where text starts and finishes and the need to hold it then put it down when writing. She suggested using large print crosswords instead. And tried the participant with some large print text.	Reading letters across two columns printed on an A4 sheet in preparation for reading. Hand at left edge of paper Letter cancelation task on A4 sheet, working sequentially through rows of letters Reading tabloid newspaper headlines Finding items on the newspaper page Placing a coloured ruler on the edge of newspaper article **Far space activities for wider field scanning** (11 minutes) Large board placed about 1.5 metres from participant, Reading playing cards (x10) and sticky notes stuck to board	*'There's one more, check back'* *'Look where your hand is'* *'Can you see where your thumb is here; what does that say?'* **Introducing a ruler to anchor for reading articles** - *'Put this down the side so you know that's where you need to start looking from. Every time you need to come back and find* [the start of the line] *'It's about knowing you need to come back to the pink ruler. That might work for you with your crosswords'* **Prompts** *'Turn your head a little bit more and see what you can see'.* *'How many cards are there - As quickly as you can'* *'Start at the edge of the board down here' [indicates edge]* **Feedback** Knowledge of performance - *'You are turning your head really well'*
P5: education, table top search activity and reading (28 minutes)	**Education about visual field loss and compensatory strategies** (3.5 minutes) Therapist using a diagram to explain field loss. *'This is why you need to make sure you turn your head far enough so your seeing bit sees what the non-seeing bit does not'.* *Try to speed up your scanning process* *Scan the environment to your left',* *'Think about making wide head turns towards affected side'* *'Turn your head so that seeing side captures what unseeing side misses',*	**Quick card search for assessment** (3 minutes). Therapist uses table top card search to assess P5's scanning and search. Placing cards in affected visual field. **Reading** (20 minutes) Reading an information sheet, manipulating area of attention using a blank piece of paper to cover text below the line being read Using a finger to guide reading.	**Encouraging strategy to look right first.** *'I want you to look over to the right first to see if you can find it'* **Feedback** Knowledge of performance – *did you notice how you were a bit quicker – if you look that way first; try to get into the habit* Therapist asking participant to compare performance before and after using the shield and finger to read Knowledge of performance – 'H*ow much better was that, much better wasn't it…the blank piece cuts away all the other stuff so it's easier to find the end but also using your finger as a prompt gives your eyes somewhere to focus.*

	'Make head and eye movements quicker' *'Start looking at the side you don't see so well first'* '*what we're trying to do is to get you to compensate for the problem – it's not going to make the area any less, the area that you don't see. What I'm doing is to give you strategies to cope with the day-to-day things you want to do and so you don't bump into things and it's easier for you to read'*. **Explaining difficulties in using a magnifying glass for reading** *'Because you don't see so well on that one side, this [magnifying glass] could make that even more difficult, because for you being further away and having a bigger picture is works better than being too close up to it all, what that does is it tends to narrow it down, cutting out a lot of information that might orientate you to where things end.*	Finding letters in array of letters on sheet of A4 Reading Motor Cycle News, using a paper to occlude text and reduce area for attention. Manipulating angle of reading material to reduce glare from light and testing different glasses.	**Prompt to use finger to guide eyes in reading** *'Just run your finger along'* P5 performed task without error with reasonable speed. Therapist explained that as he practiced the scanning reading exercises he should sit at the table and use his finger to guide the reading at first but with practice he may be able to read without using his finger and sitting in an easy chair. **Feedback** *'So you can do it but it's quite effortful isn't it'.*