



**THINK OUTSIDE  
THE BOX**



# Taking creativity outside the box –using activity analysis to focus on work as an occupation from acute to community

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# AIMS AND OBJECTIVES



- ▶ Being able to focus on work as an occupation can be challenging, complex and fragmented as you can be constrained by the environment you are working in
- ▶ Use of Activity analysis to understand work roles, tasks, duties and how to creatively simulate them in any setting

# Objectives of Webinar



- ▶ Apply activity analysis specifically to work roles, tasks, and duties
- ▶ Identify the match and/or mismatch between job demands and current abilities
- ▶ Use creative, occupation based approaches to simulate work tasks in any environment
- ▶ Shape return to work journeys that are paced, meaningful and clinically sound
- ▶ Build confidence in your reasoning when advising employers , MDT colleagues and clients

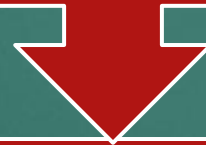
# Our role



- ▶ Occupational therapists are uniquely placed to help individuals return to work or study, following illness, injury or disability by identifying barriers and implementing strategies to help overcome these barriers to enable a safe and successful return.
- ▶ RCOT – 2024 conference – CALL TO ACTION
- ▶ EARLY CONVERSATIONS

# Activity Analysis

Activity analysis allows occupational therapists to break down an occupation into its component demands, compare those demands with a person's current abilities, identify barriers to participation, and develop appropriate interventions, accommodations, or return-to-work plans.



In vocational rehabilitation, activity analysis forms the bridge between a person's **functional capacity assessment** and the **actual demands of work**.

# Activity analysis

- Bottom up vs top down
- Components: physical, cognitive, psychosocial/emotional, environment
- Why a person is experiencing difficulty with a task
- What abilities are needed to perform the task
- How the activity can be adapted to match the person's abilities
- Whether the task can be used therapeutically to develop skills

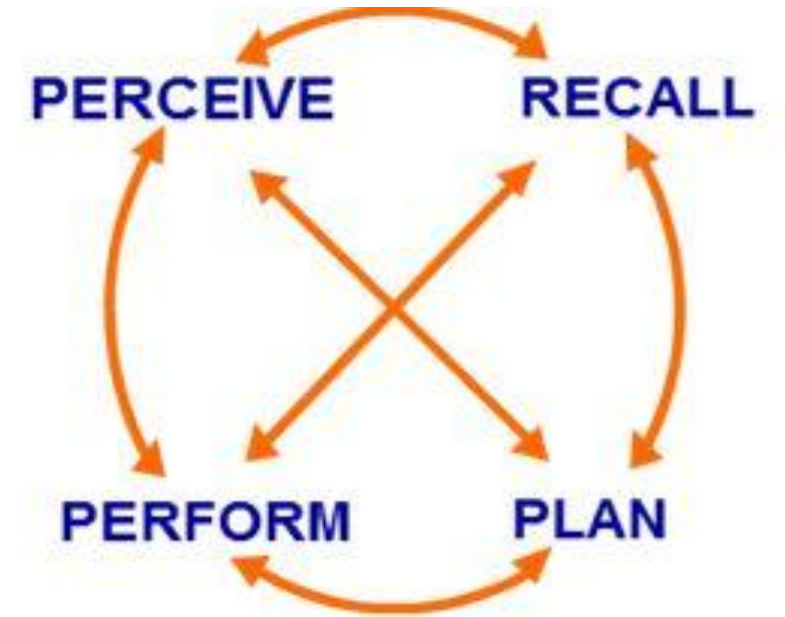


# PRPP

- ▶ PRPP System of Procedural Task Analysis
- ▶ Assessment of client mastery of occupational performance

It is used to evaluate how a person processes information while performing everyday tasks and occupations.

Unlike assessments that focus primarily on physical ability, PRPP examines the **cognitive strategies** a person uses to complete a task.



# Case study – Betting shop manager



- 28 yr old male, hit by car whilst cycling, no LOC, taken to local hospital & later discharged
- Legal claim: injuries sustained were: frontal contusions & diffuse axonal injury
- Instructed as private OT – completed cog assessments found significant impairments, attention, memory & executive function. Cognitive fatigue ++ poor sleep & PTSD.
- ▶ Independent basic ADLs, mother assisted with admin, finances & shopping/cleaning
- ▶ Very motivated to return to work (only goal)

# Case study – betting shop manager



- Work: full-time deputy manager in a betting shop
- Loved his job & was well liked & respected
- Barriers to RTW: fatigue & lack of routine
- Intervention: routine building, basic ADLs, sleep hygiene, fatigue management, cog rehab, visual rehab
- RTW goal: made contact with employer to introduce self & role
- Obtained JD & training manual for role
- Working on training modules, tested by me.

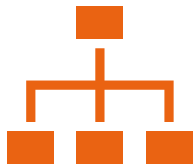
# Work simulation tasks

- Reading local newspapers to locate horse races, finding names and times & matching to races – started 1 paper then had several papers to look at same time (try to mimic multiple screens)
- Horse racing fixtures: had to identify errors & match them in set time frame
- Input race information onto spreadsheets
- Practiced visual scanning with screens
- Practiced customer scenarios (placing bets, cash, role play)
- Liaison with employer re: practice shifts

# Assessment in workplace

- Met with employer, assessed work environment including observing other staff members.
- Employer agreed to assessment in workplace (client was extra staff member)
- Observed him complete 2hr shift (job demands analysis)
- Strategies put in place for 2<sup>nd</sup> shift (4hrs under OT observation)
- Debrief with employer & then created GRTW plan, 2hrs, 4hrs, 6hrs & 8hrs, non-consecutive days build up days/hrs. put in place non-consecutive days and 24hrs maximum per week
- At time of discharge had been working for 2 yrs

# Job demands analysis



Structured process designed to identify the specific physical, psychosocial and environmental requirements of a job.



Information obtained through employer, client, job company websites, e.g indeed, job descriptions, One-net



Breaks down roles into the components required (physical & cognitive)



The job demands analysis must include details about the job position, requirements related to safety, training needed, hours of work, skills needed, equipment used, and the work environment with considerations for accessibility.

# Job demands analysis



- ▶ Occupational roles/history
- ▶ Length of time in role
- ▶ Hours/work pattern/journey to work
- ▶ Contract
- ▶ Supervisory/manager responsibilities
- ▶ Margin of error
- ▶ Working relationships
- ▶ Barriers to return to work
- ▶ Enablers (facilitators) to return to work
- ▶ Work environment
- ▶ Essential job demands (tasks/activities performed)

|                                 |                                                                                                        |  |  |   |   |
|---------------------------------|--------------------------------------------------------------------------------------------------------|--|--|---|---|
| <b>Cognition</b>                |                                                                                                        |  |  |   |   |
| Attention                       | Needing to multi-task between screens & customers                                                      |  |  |   | X |
| Concentration                   | As above                                                                                               |  |  |   | X |
| Memory                          | Remember when to check racing results                                                                  |  |  | X |   |
| Problem-solving/decision-making | Shift management allocation                                                                            |  |  | X |   |
| Executive functions             | Planning tasks in day that are required as open/close down in between serving customers, taking breaks |  |  |   | X |
| Psychosocial                    | Building and maintaining rapport and interpersonal relationships with colleagues and customers         |  |  |   | X |

# Job demands & capacity

# Job demands & capacity

| Additional Conditions and demands        |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>Environmental Conditions</b>          | <input type="checkbox"/> <b>Hot</b><br><input type="checkbox"/> Cold<br><input type="checkbox"/> Outdoor<br><input type="checkbox"/> <b>Indoor</b><br><input type="checkbox"/> Dry<br><input type="checkbox"/> <b>Humid</b><br><input type="checkbox"/> <b>Noise</b><br><input type="checkbox"/> <b>Vibration</b><br><input type="checkbox"/> Glare                     | <input type="checkbox"/> Adequate lighting<br><input type="checkbox"/> <b>Moving objects</b><br><input type="checkbox"/> Working at heights<br><input type="checkbox"/> <b>Slippery surfaces</b><br><input type="checkbox"/> Congested area<br><input type="checkbox"/> <b>Sharp edges</b><br><input type="checkbox"/> <b>Fumes/Vapours/gases</b><br><input type="checkbox"/> other                                                                                         | <b>Comments:</b> |
| <b>Psychological/<br/>Mental Demands</b> | <input type="checkbox"/> <b>working under pressure</b><br><input type="checkbox"/> <b>fast pace</b><br><input type="checkbox"/> <b>multiple tasks</b><br><input type="checkbox"/> complex/ varied tasks<br><input type="checkbox"/> <b>precise standards</b><br><input type="checkbox"/> control of work pace<br><input type="checkbox"/> <b>control / plan of work</b> | <input type="checkbox"/> close supervision<br><input type="checkbox"/> follow instructions<br><input type="checkbox"/> <b>confrontational situations</b><br><input type="checkbox"/> incentive/piece work<br><input type="checkbox"/> irregular hours<br><input type="checkbox"/> overtime<br><input type="checkbox"/> <b>reading</b><br><input type="checkbox"/> working alone<br><input type="checkbox"/> <b>working in a group</b><br><input type="checkbox"/> traveling |                  |
| <b>Sensory/<br/>perceptual demands</b>   | <input type="checkbox"/> <b>hearing</b><br><input type="checkbox"/> <b>speech</b><br><input type="checkbox"/> <b>colour vision</b><br><input type="checkbox"/> <b>near vision</b><br><input type="checkbox"/> <b>far vision</b>                                                                                                                                         | <input type="checkbox"/> <b>spatial perception</b><br><input type="checkbox"/> <b>Tactile</b><br><input type="checkbox"/> <b>smell</b><br><input type="checkbox"/> <b>taste</b>                                                                                                                                                                                                                                                                                             |                  |

# Environment



- ▶ How do we simulate the environment and physical work demands?
- ▶ Same noise level, lighting, temperature, surfaces, tools

| Weeks / Date commencing      | Monday                       | Tuesday                      | Wednesday                    | Thursday                     | Friday                       | Saturday                     | Sunday                       | Total Hrs/Week       |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|----------------------|
| Wk 1 & 2<br>10 May 2021      | 10am – 2pm<br>(15 min break) | Day off                      | 10am – 2pm<br>(15 min break) | Day off                      | 10am – 2pm<br>(15 min break) | Day off                      | Day off                      | 12 hrs               |
| Wk 3 & 4<br>24 May 2021      | 10am – 2pm                   | 10am – 2pm                   | Day off                      | 10am – 2pm                   | 10am – 2pm                   | Day off                      | Day off                      | 16 hrs               |
| Wk 5 & 6<br>07 June 2021     | 10am – 2pm                   | 10am – 2pm                   | 10am – 2pm                   | 10am – 2pm                   | 10am – 2pm                   | Day off                      | Day off                      | 20 hrs               |
| Wk 7 & 8<br>21 June 2021     | 10am – 2pm                   | Day off                      | 10am – 4pm<br>(30 min break) | 2pm – 8pm<br>(30 min break)  | 4pm – 8pm                    | 2pm – 8pm<br>(30 min break)  | Day off                      | 24 hrs               |
| Wk 9 & 10<br>05 July 2021    | Day off                      | 12pm – 6pm<br>(30 min break) | 12pm – 6pm                   | 12pm – 6pm                   | 12pm – 6pm                   | 12pm – 4pm                   | Day off                      | 28hrs                |
| Wk 11 & 12<br>19 July 2021   | Day off                      | 12pm – 8pm<br>(45 min break) | 12pm – 8pm<br>(45 min break) | Day off                      | Day off                      | 12pm – 8pm<br>(45 min break) | 12pm – 8pm<br>(45 min break) | 32hrs                |
| Wk 13 & 14<br>02 August 2021 | Day off                      | 10pm – 6pm<br>(45 min break) | 10pm – 6pm<br>(45 min break) | 12pm – 8pm<br>(45 min break) | 12pm – 8pm<br>(45 min break) | 6pm – 10pm<br>(45 min break) | Day off                      | 36 hrs               |
| Wk 15<br>16 August 2021      | 2pm – 10pm<br>(45 min break) | Day off                      | 2pm – 10pm<br>(45 min break) | 2pm – 10pm<br>(45 min break) | 2pm – 10pm<br>(45 min break) | Day off                      | 2pm – 10pm<br>(45 min break) | 40hrs<br>(Full-time) |

### Duties Permitted

This is not an exhaustive list:

- Serving customers
- Translating bets
- Updating results
- Checking takings
- Review of process and procedures
- Emptying machines
- Cashing up machine
- Updating board and changing medium size posters

### Restricted Duties

- No supervisory responsibilities or banking responsibilities (for at least two weeks)
- To work with experienced colleague/manager and no lone working for at least two weeks.
- Not to change large 6ft posters

# Return to work plan

# Case study - Plumber



- Part of a VR trial (ROWTATE) – all virtual input
- RTA: fractured femur fixed with surgery(no other injuries)
- Prev fit & well, active with yoga & cycling
- Pain & routine were initial issues
- Progressed standing & mobility (got off crutches, increased walking distance, started cycling)
- Circuit exercises, squats, knee bends
- Simulation of fixing taps, removing bath panels, increased walking distance, balance work, carrying tool belt
- Increased task complexity, time element
- Practiced going upstairs (carrying items)
- RTW – full-time 6 weeks



# Job demands & capacity

## Job Demands matched to Capacity

### Reported Demands

Key: (N = **Never**, O=**Occasional** 0-33% of workday, F=**Frequent** 34-66% of workday, C=**Constant** 67-100% of workday)

|                        | Parameters [record heights, distances etc.] Doing what?     | N | O | F | C |
|------------------------|-------------------------------------------------------------|---|---|---|---|
| <b>Mobility</b>        |                                                             |   |   |   |   |
| Sitting                |                                                             | X |   |   |   |
| Standing               | For prolonged periods of time (minimum 45-60mins) at a time |   |   |   | X |
| Walking                | On jobs, between jobs                                       |   |   | X |   |
| <b>Manual Handling</b> |                                                             |   |   |   |   |
| Lift                   | Lifting tools, bulky items e.g bath panels                  |   |   | X |   |
| Carry                  | As above                                                    |   |   | X |   |
| Push/Pull              | Pulling items out of walls, pipes, push fittings in         |   |   | X |   |
| <b>Agility</b>         |                                                             |   |   |   |   |
| Bend                   |                                                             |   |   | X |   |
| Squat                  |                                                             |   | X |   |   |
| Crouch                 | Awkward places, postures                                    | X |   |   |   |
| Kneel                  | Prolonged period e.g under sinks                            | X |   |   |   |
| Crawl                  |                                                             | X |   |   |   |
| Climb stairs           | Working on multiple levels                                  | X |   |   |   |
| Climb ladders          |                                                             | X |   |   |   |
| Above shoulder work    |                                                             |   | X |   |   |

# Match vs mismatch



| Plumber Following Femur Fracture                |                 |                                                 |                  |                                              |
|-------------------------------------------------|-----------------|-------------------------------------------------|------------------|----------------------------------------------|
| Job Demand                                      | Job Requirement | Current Capacity                                | Match / Mismatch | Comments                                     |
| Walking between job sites                       | Frequent        | Able to walk independently                      | ✓ MATCH          | Ambulates safely on level surfaces           |
| Standing while completing plumbing tasks        | Frequent        | Able to stand for moderate periods              | ✓ MATCH          | Tolerates standing with minimal discomfort   |
| Accessing residential and commercial properties | Frequent        | Able to negotiate standard access routes        | ✓ MATCH          | No significant mobility restrictions         |
| Inspecting plumbing systems                     | Frequent        | Able to bend and visually inspect work areas    | ✓ MATCH          | Within current capacity                      |
| Use of hand tools                               | Frequent        | Able to use upper limbs effectively             | ✓ MATCH          | No upper limb limitations identified         |
| Carrying toolboxes                              | Frequent        | Unable to carry heavy items                     | ✗ MISMATCH       | Femur fracture recovery limits load carrying |
| Transporting pipes and fittings                 | Frequent        | Unable to carry materials safely                | ✗ MISMATCH       | Risk of overload and re-injury               |
| Lifting equipment (10-25 kg+)                   | Frequent        | Not currently able to lift/carry required loads | ✗ MISMATCH       |                                              |

# Graded return to work plans



- ▶ Plumber:
- ▶ Week 1: 4hrs per day: 3 days per week: 1-2 jobs per day, light lifting (fixing taps) local jobs
- ▶ Week 2: 5hrs per day: 4 days per week: 2-3 jobs per day, 5kg only, mix of admin tasks
- ▶ Week 3: 6hrs per day: 4 days per week: 10kg, 3-4 jobs per day, bending & kneeling
- ▶ Week 4: 7hrs per day: 5 days per week: 15kg, wider geographical area, longer jobs, awkward postures, installations, standing 60 mins +
- ▶ Week 5: 8hrs per day: 5 days per week: 20kg majority of job tasks
- ▶ Week: 6: ensure able to maintain this level
- ▶ Review two weekly

# Case examples - acute

- 35 yr old male, had benign brain tumour removed. Concerns re: concentration, processing speed & fatigue. Worked as a solicitor. Functional assessment & use of work sim task – used a case scenario to practice questions. Referral to community neuro & VR services
- 58 yr old female worked as a medical secretary also had brain tumour removal. Practice on ward typing up letters (at speed)
- 30 yr old male (TBI), worked as carer. Practiced planning task including medication duties

# Case examples – acute & rehab

- 25 yr old male (TBI), walking but with dysexecutive syndrome. Worked as police officer response unit. Practice talking through multiple scenarios to determine his ability to identify risk & respond/prioritise in timely manner.
- 40 yr old recruitment manager in rehab unit post TBI with executive dysfunction, CCD. Practiced scenarios of searching for candidates CVs and responding to calls (role play)

# Case example - rehab

- 30 yr old male in rehab unit (post TBI), mild cog changes, mild left weakness & reduced hand –eye coordination. Worked as hairdresser, neuropsych testing demonstrated significantly impaired visuo-spatial awareness. Neuropsychologist concluded he would not return to hairdressing role.
- Practiced standing, stooping, holding items including scissors, fine motor tasks e.g cutting paper shapes.
- Graded to cutting A3 paper on the wall at different lengths/angles, then practicing on wigs (me as model!)
- Referred to community & returned to hairdressing



# Graded return to work plans



- ▶ Person & job role specific
- ▶ Carefully planned & contributed to by all parties
- ▶ Completed following assessments of job demands & capacity
- ▶ Agree timeframes from start e.g. 6 weeks, 12 weeks with regular review points
- ▶ Early liaison with work & ongoing scheduled reviews, ensure they are able to provide constructive feedback & monitoring
- ▶ Grade via number of hours and/or days
- ▶ Monitor fatigue, pain, cognition etc

# Creativity & thinking outside the box



- ▶ Understand the job role & expectations in detail
- ▶ Source information on role via various methods e.g job adverts, company websites, job descriptions
- ▶ Use your skills of activity analysis/job demands to think about where the client is currently at functionally and where they need to be (how are they going to get there)
- ▶ Utilise technology to help you eg AI, simulators
- ▶ Don't let the environment constrain you

# Summary



- ▶ Start conversations about work early (details of job role)
- ▶ Identify potential barriers early
- ▶ Analyse the occupation thoroughly
- ▶ Compare job demands with capacity/capabilities current & likely future (what is needed now/ in future)
- ▶ Identify match vs mismatch – design your intervention plan around this
- ▶ Simulate work creatively
- ▶ Involve employer early & throughout
- ▶ Actual assessment in the workplace
- ▶ Grade the return not merely the hours (duties, loads, complexity)
- ▶ Do not let clinical environment limit VR – get creative!

