



Basis of TT Research/evidence

The SATCo¹ assessment identifies at which point on the child's trunk Targeted Training to promote head and trunk control should commence. Responsible prescription of equipment should be tailored to benefit the individual child²⁰ and these benefits should be identified prior to supply of the specialist equipment. Evidence in support of potential benefits comes from liaising with the child/ parents/ carers, drawing on clinical experience and sourcing relevant research evidence to support the prescription²¹.

1. Parent and Child preferences

The decision to embark upon SATCo assessment and a subsequent programme of Targeted Training should be made in conjunction with the user and parents/ carers. Therapy goals should be set with the child and parents.

2. Clinical expertise

Physiotherapists with experience in the management of paediatric neurodisability may identify a child who is likely to benefit from Targeted Training therapy. The SATCo identifies the starting point for Targeted Training. Effectiveness of Targeted Training therapy may be measured via repeated SATCo assessment and GMFM assessment alongside review of the child's individual functional goals.

3. Research evidence

- SATCo has been proven a valid and reliable outcome measure in the assessment of trunk control²⁰.
- Children with moderate or severe cerebral palsy and other problems of movement control show deficits of trunk control²³.
- Research has shown that trunk control is fundamental to function and movement in the upright posture, such as sitting¹⁰ and it has also been shown to be a fundamental contributor to walking ability¹³.
- Preliminary single case design research showed that Targeted Training therapy can assist in the acquisition of sitting balance in children with CP in c. 18 weeks⁶.
- The combination of Targeted Training with physiotherapy treatment as usual for children with cerebral palsy resulted in¹⁸:
 - a statistically significant improvement in motor function exceeding the expected norm, especially in those children with more severe gross motor function disability
 - a statistically significant improvement in activities of daily living (Pediatric Evaluation of Disability Inventory)
 - a statistically significant improvement in posture including sitting and standing (Chailey Levels of Ability)
 - a statistically significant improvement in trunk control (SATCo)

Early Intervention

- On average the Targeted Training Stander is suitable for 1-5 year olds.
- Children with cerebral palsy reach 90% of their functional potential by age 5 with most gains in the first 2 years²⁴.
- This window of rich development is an opportunity to optimise neuroplasticity, harness cortical connections and link to dedicated function.
- There is a direct link between early brain development and gaining specific functional skills²⁴.
- Control learning from early intervention minimises the likelihood of secondary complications such as hip displacement¹⁹.
- It can also reduce therapy and equipment requirements in later years, maximising efficient use of resources¹⁹.

Functional and Postural Assessment

Targeted Training works on control, assessed by the SATCoⁱ at each review session. Upright control of the head and trunk is directly linked to function [GMFM] ^{10,11,12,13,14,15,16,17} and upright postural control carries over to other skills, such as lying and rolling ⁴. It is recommended that the Gross Motor Function Measure [66 or 88]ii is used at six-monthly intervals to see the effect of Targeted Training on function. Additional use of the Pediatric Evaluation of Disability Inventory ⁱⁱⁱ will indicate whether functional change is being integrated into everyday life. The Posture and Postural Ability Scale ^{iv} can provide additional insight into a child's posture during function and give a record of postural alignment.

For full list of references please visit the Squiggles TT page at www.leckey.com