

Stories of success

Measuring change in children with a brain injury and their families



Doing well in
mainstream
school

**INCREASED
ENERGY**

25%
improved
grades

BRAIN INJURY
FROM BIRTH

Excellent
Family
support

reduced
anxiety

Joined a local swimming club
**EMOTIONAL SKILLS
HAVE DOUBLED**

BETTER FRIENDSHIPS
AND SOCIAL SKILLS

recolo

We are Recolo, we understand

At Recolo we aim to collect information that enables our clients, their families and clinicians to understand the process of change throughout their rehabilitation intervention. Our main aim is to not only track these changes using standardised measures but to add context and individuality to each of our client's personal journeys with Recolo.

We believe in integrating neuroscience innovations with evidence from developmental neuropsychology. At Recolo we tailor our interventions for each individual and their family. We understand that family functioning is closely linked to a child's progress. We work systemically with the whole family, as well as school and wider support network. We strongly believe that supporting parents, siblings and guardians increases chances of rehabilitation success.

OUR INTERVENTIONS

We use a range of outcome measures to evaluate interventions with children, young people and their family. Some of our interventions include:

- Antecedent behaviour management
- Systemic therapy for families
- Neuropsychological assessment
- Cognitive remediation
- Educational Psychology support and school liaison
- Trauma work for children and adults
- CBT for children and adults
- Consultation and support to rehabilitation and allied therapy teams.

HOW WE MEASURE OUTCOME

To evaluate our interventions, we use a wide range of standardised measures. Using these allows us to measure baseline functioning (family, social, emotional, cognitive, quality of life, level of fatigue) and compare this to functioning during and post-intervention. Questionnaires can be completed by parents, teachers, children and young people.

We also use Goal Attainment Scaling (GAS) to set, plan and implement individualised goals.



STANDARDISED OUTCOME MEASURES

Pediatric Quality of Life Questionnaires (PedsQL) are flexible tools that measure health related quality of life for children and adolescents with acute and chronic health conditions.

These also include the family impact of paediatric health conditions and quality of life specific to cerebral palsy and fatigue.

Child and Adolescent Scale of Participation (CASP) is a 20 item questionnaire that measures levels of participation at school, home and within the community.

Behaviour Rating Inventory of Executive Functioning (BRIEF) can be completed by parents/teachers and the child. This measures executive functioning abilities.

We use a range of other measures, such as the Strengths and Difficulties Questionnaire (SDQ), Family Assessment Device (FAD), Beck Youth Inventory, (BYI-II), trauma measures and for over 18s, the BDI, BAI, SASNOS and QOLIBRI.

We also use GAS as a measure of change. Rehabilitation is structured around personal goals that are routinely set, reviewed and evaluated using GAS.

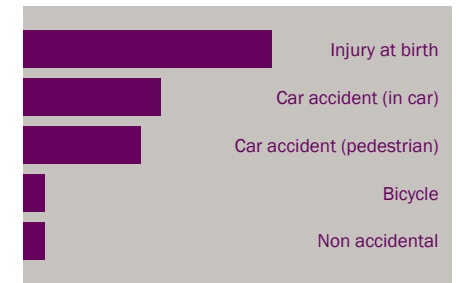
Our clinicians are based in a variety of locations throughout the UK and so a wide geographical coverage for cases can be provided.



To evaluate our interventions, we use a wide range of standardised measures.

CAUSES OF BRAIN INJURY

The most common causes of brain injury seen by clinicians at Recolo are shown below as of 2014.



OUR CASE STUDIES

The following case studies describe the rehabilitation process and illustrate the complexity of the interventions and diversity of children, young people and families we work with.

LOUISE'S STORY

Intervening at all levels improves quality of life and emotional wellbeing.

BACKGROUND

Louise sustained a neonatal injury leaving her with symptoms including visual impairment, co-ordination difficulties and significant non-verbal learning difficulties. Although supported in mainstream school, Louise became increasingly anxious about school, friendships and managing academically. Her social opportunities, self-care and independence skills were limited.

Louise was referred to Recolo when she was 15 years old. On assessment Louise's PedsQL scores were low with both her and mum agreeing that school, peer relationships and emotional functioning were the most distressing, shown by her low CASP scores (limited participation).

INTERVENTION PLAN

Louise and her team completed a 12-month programme together; some of the techniques are included below:

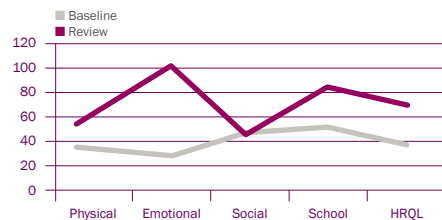
- Modified weekly CBT sessions to cope with anxiety around school and community activities
 - e.g. Enhancing emotional vocabulary
 - Modified relaxation techniques
 - Scaling and predicting anticipated worries
 - Problem solving techniques and skills
 - Positive memory diaries
- Support from an educational psychologist to secure a more suitable school placement
- Liaison and guidelines for new school
- Occupational therapist and support worker working on self-care, community and independence goals
- Speech and language therapist supporting social communication skills

- Regular team meetings: all using a stepwise, low anxiety approach to learning e.g. to use money
- Increased physical activity and community participation: horse-riding, Pilates and swimming.

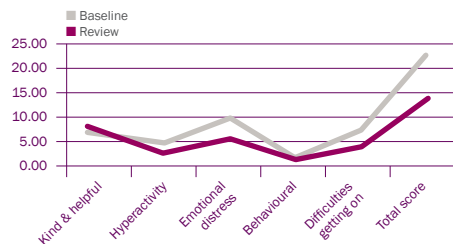
OUTCOMES

Louise has made significant improvements since the beginning of her 12-month interventions. In particular Louise saw an improvement in her fatigue levels and strengths and difficulties (SDQ). The family reported improvements in their stress levels (PEDS-Family impact). Louise's scores on the self-report PedsQL questionnaires revealed a great improvement in emotional functioning improvement (30 to 90 where 100 is the best possible score). She has settled well into her new school, where communication between home and teachers is better and plans are in place to work on her functional skills.

Baseline and Review scores for PedsQL (self report) measure



Baseline and Review scores for SDQ (parent report)



STEPHEN'S STORY

Complex intervention using Goal Attainment Scaling.

BACKGROUND

15 year old Stephen was involved in a road traffic accident during his second year at primary school. As a result of this accident Stephen suffered physical injuries and a brain injury which impacted his cognitive, emotional, social and behavioural development. Stephen found it hard to communicate on a complex level and remember new information.

Over a 12 month period Stephen has worked closely with his Recolo clinician and key people in his support network (including support workers, teachers and his family) on interventions to help him improve his quality of life and focus on his personal goals that were set and reviewed using goal attainment scaling (GAS).

INTERVENTION PLAN

Breakdown of support sessions:

- One to one with clinician: Mood monitoring and intervention including CBT for anger; development of self-control skills
- Clinician and parents: Information and education into Stephen's brain injury; emotional support for the family
- Stephen and sibling: behavioural support between the siblings; introduction of the sibling to CAMHS (Child and Adolescent Mental Health Services)
- Case manager: Collaborative goal setting and review
- Support worker: Neuropsychological supervision
- School: Brain injury education and strategy development; promotion of school attendance; support with transition to new school

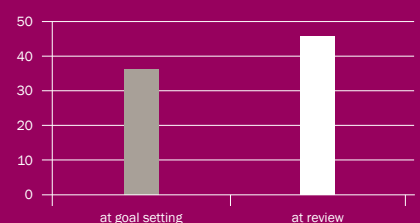
- Across all levels: the development of positive behaviour supports.

OUTCOMES

- 28 goals were set between Stephen and his parents over a year
- Goals were client centred (e.g. to attend the gym weekly for two months)
- Stephen met 53% of these goals
- His overall GAS score of 45 meant that challenging goals were being set
- Analysis of unachieved goals led to a focus on helping Stephen build insight
- Stephen has made significant achievement in his emotional and behavioural adjustments
- Parents have received support regarding Stephen's brain injury
- Stephen is still engaging in full-time education and concentrating on his GCSEs.

Stephen's story shows that by engaging the wider system, the young person is supported to accomplish their goals; interventions can be longer than 12 months; and a system of goal-setting and review can increase a young person's goal commitment and attainment.

Median GAS scores over one year period



MARK'S STORY

Supporting educational transitions.

BACKGROUND

Mark is a 17 year-old student studying for his A-levels. Mark was a premature baby due to his mother being involved in a road traffic accident while she was pregnant. As a result of this Mark suffered a brain injury.

As Mark reached secondary school he began to notice problems with his school work and his grades. Educationally Mark progressed through mainstream schools and only found difficulty whilst trying to study independently for his A-levels. One of Recolo's Educational Psychologists has worked closely with Mark to address these issues.

Mark's neuropsychological assessments revealed that his cognitive speed of processing was significantly weaker than his other cognitive skills, which linked to his problems in school. Mark's BRIEF and SASNOS scores showed that his metacognitive skills were the most problematic areas including; planning and organising goals and sequences, working memory and the ability to monitor his own behaviour.

INTERVENTION PLAN

Mark's intervention consisted of a range of face-to-face home visits and Skype sessions to devise strategies such as:

- Devising revision techniques
- Planning strategies to help in exams
- Teaching Mark how to apply for jobs and prepare for interviews.

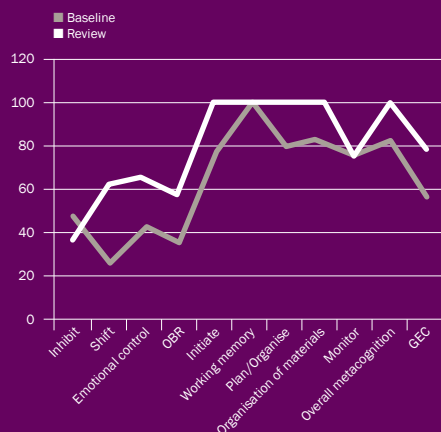
OUTCOMES

Mark responded excellently to the structured intervention.

- Completed A-levels
- Started a new college course
- Shows strong cognitive skills in language and problem solving
- Mark has a suitable part-time job.

Mark and his team have seen a substantial change over the 12 month period. However Mark still has areas of need and has support plans in place for the next 12 months to help him through the next stage of his life. Mark's story is an example of intervening with a young person at a stage of their life when executive functioning difficulties became more marked, as illustrated by his BRIEF scores.

Mark's BRIEF scores before and after Recolo intervention



CHRISTOPHER'S STORY

Relieving mother's traumatic symptoms improves family wellbeing.

BACKGROUND

Christopher (aged 5) sustained a brain injury at birth which resulted in mild cerebral palsy and visual and hearing impairments. Christopher finds it hard to communicate verbally with his family but can communicate non-verbally. Christopher has trouble sleeping and participating in daily activities which affects them as a family unit. His parents reported that they find it overwhelming that their son has a brain injury due to a traumatic birth. As a couple Christopher's parents have found it hard and very stressful to communicate together since their traumatic experience and both feel as though they are not fully supported.

Assessment of Christopher and his family's needs revealed that his mother was suffering from high levels of anxiety and depression (BDI and BAI scores) and would benefit from one-to-one psychological therapy and family support. It was agreed by Christopher's parents and clinician, that by working with both of them, this would help them as a family, and subsequently have a positive effect on Christopher and his care.

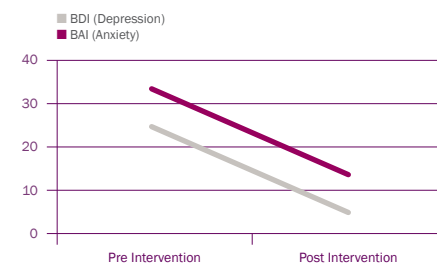
INTERVENTION PLAN

Christopher's mother attended trauma-focused CBT sessions to help with her post traumatic memories of her son's birth. In addition, these sessions enabled Christopher's mother and father to improve their relationship and ability to co-parent.

OUTCOMES

- Christopher's mother and father were able to understand why they responded differently to their son's traumatic birth and have since enjoyed co-parenting
- Christopher's mother's PDS scores fell from 44.5/51 to 2.5/51, (non-clinical range for PTSD symptoms)
- Christopher's mother's BDI scores showed moderate depression (26/63) before the intervention. After the intervention her score was 4/63 (non-clinical range)
- BAI scores decreased from severe to mild anxiety
- Christopher's family is now hopeful and have positive plans for the future.

Mother's anxiety and depression scores before and after the intervention



For further information on the range of services that Recolo can offer, please contact Lois Shafik-Hooper on **07715 104802** or lois.shafikhooper@recolo.co.uk

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Reed, Byard & Fine
Child neuropsychology & rehabilitation

Recolo UK Ltd
10 Harley Street
London
W1G 9PF

020 7467 8387
care@recolo.co.uk
www.recolo.co.uk