A Systematic Evaluation of Cognitive Remediation Therapy (CRT) for the Treatment of Children and Adolescents with Anorexia Nervosa.

Jennifer Moynihan MSc, Dr Lucia Giombini CPsychol, Dr Sophie Nesbitt CPsychol
Outline

- The Context - Rhodes Farm (RF)
- Systematic implementation of CRT at RF
- Results
- Discussion
Outline

- The Context - Rhodes Farm (RF)
  - Systematic implementation of CRT at RF

- Results

- Discussion
Rhodes Farm

- Rhodes Farm is a specialist treatment centre for children and adolescents aged 6-18 who need hospital treatment for an eating disorder.

- Currently we have 24 inpatient beds, funded by the public sector.

- The service treats young people from all over the UK and overseas.

- The service is moving to Rhodes Wood Hospital in Spring.
Multidisciplinary treatment

- Peer group
- Meaningful week
- Psychological
- Medical
- Dietetic
- School
- Family
- Nursing
Outline

- The Context - Rhodes Farm (RF)

- Systematic implementation of CRT at RF

- Results

- Discussion
What is CRT?

- A treatment that focuses on the **process** rather than the content of thoughts.

- The **HOW** rather than the **WHAT**.

- Involves the use of exercises, tasks, games and puzzles etc.

- The choice of puzzles we use is informed by age, developmental status and cognitive styles.
Why CRT for AN?

- CRT aims to remedy the cognitive weaknesses that may underlie Anorexia Nervosa.

- It has been found to improve cognitive flexibility and the ability to see the big picture.

- These improvements are seen even in those who have been ill for many years.

- Young patients with AN readily engage in and enjoy the therapy.

See Tchanturia, Lounes & Holttum (2014) and Dahlgren & Rø (2014) for a review.
CRT helps patients to:

- Consider their cognitive styles by doing simple cognitive tasks.
- Reflect on how these relate to real life.
- Explore alternative strategies, pros and cons.
- If necessary apply new skills and strategies in real life to achieve personal goals.
Session Plan

A CRT cycle involves a total of 8 sessions, administered twice-weekly, for approximately 45 minutes.

The cognitive domains explored are:

- Cognitive flexibility
- Central coherence
- Cognitive inhibition
- Visuo-spatial processing
- Memory
- Planning
Pre and Post Assessment

This assessment battery was developed based upon findings from the “Ravello Profile” (Rose et al., 2011).

It is administered pre and post the CRT cycle.

- **Central Coherence**: Copy and Immediate recall trials of the Rey Complex Figure Test. **Central Coherence Index (CCI)**.
Pre and Post Assessment

- **Cognitive Inhibition**: Condition four of the colour/word interference (D-KEFS). Time Taken – Error rate.

Outline

- The Context - Rhodes Farm (RF)
- Systematic implementation of CRT at RF
- Results
- Discussion
All patients were female with a diagnosis of AN (ICD-10).
A repeated measures T-test indicated an improvement in **Central Coherence Index** between pre and post CRT assessments (p<.001).
A Wilcoxon Signed-ranks test indicated an **improvement in Error rate** between pre and post CRT assessments ($p = .019$).
A repeated measures T-test indicated an improvement for Time taken between pre and post CRT assessments ($p < .001$).
A Bonferroni corrected repeated measures t-test showed an improvement in Global Executive Composite scores p=.003
Bonferroni corrected repeated measures T-Tests in each subscale found a significant improvement on:

- Behavioural Shift
- Emotional Control
- Working Memory
- Planning / Organising

![Graph showing T-Score improvements](image-url)
Outline

- The Context - Rhodes Farm (RF)
- Systematic implementation of CRT at RF
- Results
- Discussion
Discussion

- The sample size was large.

- A weakness is that no control group was available.

- Future studies should use a RCT design in a child and adolescent population.
Summary

- There are improvements after CRT for central coherence, cognitive inhibition.
- The patients feel there is an improvement in their cognitive functioning after CRT (BRIEF-SR results).
- The results are consistent with the literature (Dahlgren & Rø, 2014; Tchanturia, Lounes & Holttum, 2014).
References


Thank You!

Jennifer.moynihan@partnershipsincare.co.uk

Lucia.Giombini@partnershipsincare.co.uk

Sophie.Nesbitt@partnershipsincare.co.uk