An evaluation of a manualised group self-esteem programme for Anorexia Nervosa patients regaining weight

Hannah Biney1*, Dr. Matt Hutt1, Rachel Matthews1, Professor Hubert Lacey1,2

Authors’ affiliations:
1 Newbridge House, Birmingham, United Kingdom
2 St Georges, University of London

Authors’ e-mail addresses:
Hannah Biney: hannah.biney@newbridge-health.org.uk;
Dr. Matt Hutt: matt.hutt@newbridge-health.org.uk;
Rachel Matthews: rachel.matthews@newbridge-health.org.uk;
Professor Hubert Lacey: hlacey@sgul.ac.uk

* Corresponding author

Abstract
Low self-esteem has been identified as a strong predictor of onset, maintenance and relapse in eating disorders. This suggests that treatment directly addressing low self-esteem might improve recovery. The Cognitive Behavioural Therapy (CBT) based group for low self-esteem is a six session manualised programme based on Melanie Fennel’s model for low self-esteem. It was developed at Newbridge House, a child and adolescent eating disorder inpatient unit in the UK. Although the use of CBT for low self-esteem is established in adult services, the Newbridge programme, adapting the same principles for children and adolescents, is to our knowledge, the first of its kind. This paper reports a service evaluation (N=63) which examines the efficacy of this group in improving low self-esteem for 12-17 year olds with a primary diagnosis of Anorexia Nervosa (AN). Paired-samples t-tests compared the differences in pre- to post-group and post-group to follow-up. Results indicate significant improvements in self-esteem as shown by improvements on the Rosenberg Self-Esteem scale, which are maintained at follow-up. This highlights that group manualised CBT for low self-esteem is effective for young people with AN and indicates the need for future controlled studies.

Key words: Self-esteem, CBT, inpatient, adolescents, Anorexia Nervosa, group therapy

1. Introduction
Self-esteem is the extent to which we like and value ourselves, including confidence and acceptance of our worth and abilities. Individuals with low self-esteem have a negatively biased view of themselves, with a strong focus on their flaws, weaknesses...
and mistakes, which tend to be global, persistent and enduring (Fennel, 1997). Healthy self-esteem is an important factor in the development and maintenance of good psychological wellbeing (Morton, Roach, Reid & Stewart, 2012). Low self-esteem is a core feature in a variety of mental health problems (Schaefer & Drewes, 2013) and it has been found to be amongst the best predictors of emotional and behavioural difficulties (Silverstone & Salsali, 2003). Although CBT for low self-esteem is commonly used in clinical practice very few studies have directly targeted treatments towards improving self-esteem in comparison to the evidence base for CBT interventions for mood disorders, such as depression and anxiety (Covin, Ouimet, Seeds & Dozois; Gaffan, Tsaois & Kemp-Wheeler, 1995; Robinson, Berman & Neimeyer, 1990; Westen & Morrison, 2001; Whittfield & Williams, 2003).

Low self-esteem has been identified as a strong predictor of onset, maintenance and relapse in eating disorders (Button et al., 1996; Fairburn et al., 1993; Fairburn et al., 2003; Fairburn, 2008; Silverstone, 1992). For patients with low self-esteem, psychological change can be particularly difficult to achieve, with the potential for prolonged admissions and increased burden of illness to the individual and their family or carers. Furthermore, low self-esteem can serve to maintain pervasive negative self-regard and a sense of little or no prospect of recovery.

Significant low self-esteem can contribute to increased striving to control eating, weight and shape, with the aim of gaining a sense of self-worth. This has been supported by Brockmeyer, et al., (2013) who suggested that in AN, self-esteem is associated with low weight, which is viewed as an achievement. This may undermine motivation to engage in positive change since weight gain would require the individual to relinquish the achievement, thus lowering self-esteem. This indicates that supporting individuals to value other, none weight and shape related aspects of themselves could support motivation to change. These findings suggest treatment of low self-esteem is clinically important. Inpatient treatment for anorexia nervosa is expensive for health care systems (Striegel-Moore, Leslie, Petrill, Garvin & Rosenheck, 2000; Agras, 2001; Crow & Nyman, 2004); any treatment which improves the likelihood of recovery should be evaluated.

Several studies have shown the efficacy and benefits of short-term CBT group therapies for low self-esteem in adult populations. Morton, et al., (2012) found a significant improvement in self-esteem for women with low self-esteem and co-morbid depression, anxiety and/or panic using Fennell’s (2006) Overcoming Low Self-Esteem Self-Help Course. A further study by Rigby and Waite (2006) found a significant improvement in self-esteem, depression and anxiety ratings in mixed gender groups based on Fennell’s (1998) model with the addition of experiential exercises and metaphor. Pack and Condren (2014), also found a significant improvement in self-esteem to a healthy level in addition to improvements in depression and anxiety to below caseness. These gains were also maintained at a three-month follow-up.

Group CBT for low self-esteem has also been used in eating disorder populations. Fleming, Doris, & Tchanturia (2014) designed and piloted a six-week self-esteem group within an inpatient adult eating disorders ward. The findings were mixed; qualitative feedback demonstrated that the group was acceptable and useful, however no statistically significant improvements in self-esteem were found, although a trend in the positive direction was observed. Furthermore, Newns, Bell and Thomas (2003) found that a long-term intervention
over the course of 20 months led to improved self-esteem in eating disordered (though not exclusively AN) participants. These findings identify that a group based approach to improving low self-esteem in adult populations is effective and further research is required exploring this in an adolescent population. To our knowledge, research into the effects of a self-esteem CBT group intervention with adolescents has not yet been reported upon in the literature.

Fennel’s (2006) model proposes that low self-esteem develops from negative life experiences, particularly in early life that influence our thoughts, beliefs, attitudes and opinions about self which serve to maintain low self-esteem. Based on this model Fennel has produced guided self-help books, which can be used to understand how low self-esteem develops and is maintained. In order to improve low self-esteem, techniques for questioning and challenging these cognitions are required. This model of low self-esteem and the self-help book, *Overcoming Low Self-esteem: A self-help guide using cognitive behavioral techniques* (Fennel, 2016) formed the basis of our group intervention. By using a group format we hoped that the young people would also benefit from a positive experience of being accepted and valued by their peers.

The aim of this service evaluation was to explore the acceptability and efficacy of a novel, manualised group therapy for self-esteem designed specifically for adolescent inpatients with AN.

2. Method

2.1. Participants

Sixty-three young people took part in the service evaluation. Participants were adolescents with a primary diagnosis of AN currently receiving inpatient treatment for their eating disorder at Newbridge House. Diagnosis was established from clinical documentation and by the inpatient multidisciplinary team (MDT) using DSM-V criteria (American, Psychiatric Association, 2013). Two young people had a co-morbid diagnosis of Autistic Spectrum Disorder (ASD), one had a co-morbid diagnosis of ASD and Gender Identity Disorder and one had a co-morbid diagnosis of Anxiety Disorder.

2.2. Therapy

The CBT for low self-esteem group is a six-session manualised programme developed at Newbridge House for adolescents based on Melanie Fennel’s model for low self-esteem in adults. This intervention is an educational and therapeutic group, which aims to provide psycho-education focusing on issues relating to low self-esteem, where it comes from, and how it can be affected. The group adopts a cognitive-behavioural approach to support low self-esteem; including the use of three and five column thought records, behavioural experiments and positive data logging.

It is expected that work is completed outside of sessions and that techniques are put into practice to ensure maximum benefit from the group.

2.3. Measures

Rosenberg Self-Esteem scale (RSE; Rosenberg, 1965) is a ten item self-report measure of self-esteem. The RSE asks individuals to consider how much they agree with ten statements on a four-point scale from ‘strongly agree’ to ‘strongly disagree’. A scoring system has been utilised whereby higher scores on the RSE indicates higher self-esteem. A score of 21 or above indicates healthy self-esteem. The RSE has shown good reliability and validity across a range of sample groups, including adolescents (Robinson, Shaver & Wrightsman, 1991).
2.4. Procedure

Patients were allocated to join the CBT for low self-esteem group as part of the standard treatment programme at Newbridge House. Participants were allocated to the group at different stages of treatment having completed a varied amount of weight restoration and other therapeutic activities.

Participants completed baseline self-esteem measures prior to commencing the group, following completion of the group and four-weeks post-group. Qualitative feedback was also collected following completion of the group, this evaluation form asked the young people to rate each session out of 10 for how helpful they had found it, with 1 being not at all helpful and 10 being extremely helpful. It also included open-ended questions asking the young people “what did they find most helpful?”, “was there anything about the sessions that was unhelpful?” and “how would you make the group better?”.

3. Results

3.1. Participant Characteristics

Data were derived from 15 separate groups and a total of 63 young people (all female).

Typically, the groups consisted of four-six young people. The sample had an average age of 15 years, 4 months (range 12 years, 5 months – 17 years, 10 months) and an average median BMI of 91.4% (range 76.1% - 109.2%) at the start of the programme. 36 young people were receiving CBT-E as individual therapy, whilst 27 young people were receiving psychodynamic psychotherapy.

Data on group drop-outs are available for all groups. Across these groups, there was a dropout rate between pre- and post-group of 14.3% and post-group to follow-up of 55.6%. Data for the four-week follow-up has only been collected for 24 young people due to the other patients being discharged from inpatient treatment prior to data collection.

3.2. Changes in Self-esteem

Mean and mean change in self-esteem scores from pre- to post-group and post-group to follow-up were calculated (Table 1). Paired sample t-tests were used to compare the means (Table 1). This analysis showed significant increases in self-esteem pre- to post-group and that these changes were maintained post-group to follow-up.

<table>
<thead>
<tr>
<th></th>
<th>Pre-group (N=63)</th>
<th>Post-group (N=54)</th>
<th>Follow-up (N=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Self-esteem (RSE)</td>
<td>17.48</td>
<td>4.23</td>
<td>19.80</td>
</tr>
<tr>
<td>Pre- to post-group (N=54)</td>
<td>Mean change</td>
<td>SD</td>
<td>t</td>
</tr>
<tr>
<td>Self-esteem (RSE)</td>
<td>2.87</td>
<td>4.33</td>
<td>5.863*</td>
</tr>
</tbody>
</table>

(*) indicates significance at 95% confidence level.
3.3. Patient feedback

The patients rated all sessions on a scale of one to ten for how helpful they found them. Average helpfulness ratings have been calculated (Figure 1).

When asked what they found most helpful about the group, the main themes included: learning how self-esteem develops, exploring ways to challenge negative thoughts and feeling listened to. Other comments included:

“Exploring core beliefs and cognitive biases”
“The skills could be applied to daily life”
“Learning that it is okay to be yourself and nobody will judge you”
“Examples of other people’s worries and thoughts made it feel less difficult to talk”

When the young people were asked if there was anything about the sessions that was unhelpful, the main themes included: filling out worksheets, homework tasks and sharing with others about personal issues.

With regard to what could be improved, the main themes included: more interactive group activities, using videos to support learning and to practice the homework tasks within sessions. Other suggestions included:

“By playing gentle music in the background to make it less stressful as thinking about our negative thoughts and behaviours can be quite anxiety provoking”
“Flashcards to support learning of techniques”

![Session Evaluation](image)

**Figure 1.** Helpfulness ratings of the participants following the intervention

4. Discussion

This service evaluation aimed to report on the efficacy of a short group CBT intervention for the treatment of low self-esteem and its acceptability for adolescent inpatients with AN. The findings highlight that the group had a significant effect on improving self-esteem, as measured by the RSE. Post-group to follow-up change was not statistically significant demonstrating that these gains were maintained at four-week follow-up. This adds further support
for previous research (Morton et al., 2012; Newns et al., 2003; Pack & Condon 2014; Rigby & Waite, 2006) showing the effectiveness of group CBT for low self-esteem. In addition, positive feedback from the patients provides evidence to support that the self-esteem group format is acceptable and helpful. It is also interesting to note that the patient feedback highlights that not one session was especially helpful, but the programme as a whole. These are encouraging results demonstrating an effective form of intervention for low self-esteem in young people with AN.

Although the specific mechanism for change has not been examined, we propose that improvements in self-esteem are attributable to cognitive changes, such as a reduction in negative biases towards the self and negative automatic thoughts that serve to maintain low self-esteem. It can also be hypothesised that the change in self-esteem may be strongly linked to the process of sharing experiences with their peers and supporting each other, which challenges core beliefs around unacceptability and worthlessness. The group format enables patients to observe patterns of thinking in others, to recognise cognitive biases and their negative impact and thereby gain insights into their own unhelpful thoughts and behaviours. It also provides an opportunity to directly challenge negative beliefs and consider alternative ways of interpreting their experiences.

However, it should be noted that these findings are limited given there was no standard treatment comparison group. Therefore, measured improvements may reflect a general trend towards recovery over time or may be due to other elements of the inpatient treatment programme. It is also important to note that all patients received additional psychological therapies (CBT-E or psychodynamic therapy) throughout their admission which may contribute to improvements in self-esteem.

Addressing some of the limitations of previous research, this evaluation included a four-week post-group follow-up. However, the attrition rate between pre-group (N=63) and follow-up (N=24) means that results from the follow-up can only be seen as indicating a trend towards maintaining improvements in self-esteem after four weeks. Consideration of alternatives to face-to-face contact for collecting follow-up data would enable retention of sample size and thus give a clear indication of the degree to which gains are maintained long-term.

The authors also recognise the inherent biases associated with investigating the effectiveness of an intervention that they were involved in developing and facilitating. Therefore, future research may benefit from independent researchers to replicate these findings and the inclusion of a control group.

5. Conclusion

Low self-esteem is widely acknowledged to be associated with a variety of mental health problems, however there is a limited evidence base regarding effective treatments, particularly in adolescent populations. This service evaluation explored a six-session CBT group for low self-esteem and demonstrated the effectiveness of this treatment for improving self-esteem in adolescent inpatients with AN. Feedback from the young people also indicates the intervention is valued and well-liked.

In summary, the initial results are promising and encourage further research in this area. A randomised controlled trial is currently ongoing to evaluate the effectiveness of this intervention and will include a four-week follow-up of participants, to provide some measure of the stability of the effects found. A measure of eating disorder psychopathology will
also be included to explore whether the intervention supports a positive change in eating disorder presentation.

**Acknowledgements**

The authors would like to thank Dr Melanie Fennel for generously sharing her ideas and supporting this project. We would also like to thank the young people who attended the low self-esteem group and acknowledge the support and contributions of colleagues including Amie Garghan, Jessica Grant, Nicola Malone, Luisa Mang, Philippa McQuilton, and Rebecca Trikic.

**Funding**

This work was supported by the Schoen Clinic: Newbridge.

**References**


consulting and clinical psychology, 63(6), 966.


