Group Therapy for Adolescents Living With an Eating Disorder: A Scoping Review

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Abstract

Group models are commonly used to treat eating disorders; however, research in this area remains largely underdeveloped. Interest in group work is likely to increase due to the demands on the public health system and the cost-effectiveness of group modalities. This scoping review sought to explore the evidence underpinning group therapy for adolescents living with an eating disorder. A literature search of 10 academic databases and four gray literature databases was undertaken in 2013. Selected Internet resources were searched and the author consulted professionals from Eating Disorders Victoria, the Butterfly Foundation, and the University of Melbourne. A total of 11 peer-reviewed articles published between 2003 and 2013 were included for review. There was an overall lack of research with no randomized-controlled trials available. Six program evaluations and five program descriptions were found, and they reported on a range of eating disorders and group modalities. The program evaluations suggested the utility of group therapy for promoting weight restoration in underweight individuals living with an eating disorder. Cognitive behavioral therapy groups were found to be more effective for bulimia nervosa and multifamily group therapy showed promise for anorexia nervosa. More rigorous research is needed to establish the effectiveness of group therapy for adolescents living with an eating disorder.

Keywords

eating disorder, group therapy, adolescents, review

Introduction

Eating disorders are life-threatening mental illnesses that cost Australians approximately Aus$60 billion every year (Deloitte Access Economics, 2012). Anorexia nervosa (AN), bulimia nervosa (BN), eating disorder not otherwise specified (EDNOS), and binge eating disorder (BED) are the most well-recognized eating disorders, all of which have significant biopsychosocial impacts upon the lives of those affected by the illnesses (Deloitte Access Economics, 2012). The peak age of onset for eating disorders occurs in adolescence (Kohn & Golden, 2001) with young people increasingly at risk due to their developmental stage and the influence of the sociocultural context (Banyard, 2010; Gremillion, 2003; Grigg, Bowman, & Redman, 1996; Hay, Mond, Buttner, & Darby, 2008). Evidence suggests that early intervention leads to better treatment outcomes (Al-Yaman, Sargaent, & Bryant, 2003; Deloitte Access Economics, 2012), indicating a need for effective treatments aimed at the adolescent population.

Group modalities are commonly used in the treatment of adolescent eating disorders both nationally and internationally, for example, Southern Health Butterfly Day Program (Victoria, Australia) and the Renfrew Centre (United States); however, research in this area remains largely underdeveloped (Fuhriman & Burlingame, 1994; Gowers & Lock, 2005). There exists a broad range of group therapies aimed at treating the various features and psychosocial impacts of the illnesses, such as body image groups (Bhatnagar, Wisniewski, Solomon, & Heinberg, 2013), nutrition groups (Goldstein et al., 2011), social skills groups (Tasca, Balfour, Presniak, & Bissada, 2012), and psychotherapy groups (Nevonen & Broberg, 2006); yet, few studies have explored the efficacy of these treatment models with the adolescent population.

In contrast, research on adults has begun to explore the utility of various group treatment modalities for a variety of eating disorder diagnoses (Brownley, Berkman, Sedway, Lohr, & Bulik, 2007; Safer, Telch, & Agras, 2001; Telch, Agras, & Linehan, 2001). There exists a body of literature demonstrating the effectiveness of group cognitive behavioral therapy (CBT) in the treatment of adults living with BN (Brownley et al., 2007; Polnay et al., 2013; Zimpfer, 1990). Dialectical behavior therapy (DBT) has shown promise in the treatment of adults living with both BN and BED (Chen & Safer, 2010; Erb, Farmer, & Mehlenbeck, 2013; Safer,
Telch, & Chen, 2009). Similarly, group interpersonal therapy (IPT) has been shown to reduce bingeing in adults diagnosed with BED (Agras et al., 1995), and emerging research is beginning to trial motivational models for adults living with AN (Touyz, Thorner, Rieger, George, & Beumont, 2003). While it is evident that group models can promote positive outcomes for individuals living with an eating disorder (Berkman, Lohr, & Bulik, 2007; Brownley et al., 2007), it remains unclear whether evidence exists to support the use of group therapy for adolescents (Keel & Haedt, 2008).

The most commonly used model of treatment for adolescents with AN is family-based treatment (FBT), while CBT is preferred therapy for BN (Lock & Fitzpatrick, 2009). Treatment approaches for adolescents living with EDNOS depend upon how closely the symptoms align with either BN or AN (Yager et al., 2012). Multifamily therapy (MFT) is posited a promising group model for young people, given its potential to strengthen familial relationships (Tantillo, 2006). An integrative group model including art therapy and drama therapy has been advocated by Diamond-Raab and Orrell-Valente (2002); however, there are no studies examining the effectiveness of this model. Research on group treatments in adolescents is somewhat haphazard with no consistent themes emerging in the literature. However, interest in group work is likely to increase due to the demands on the public health system and the cost-effectiveness of group modalities (McGilley, 2006; Wanlass, Moreno, & Thomson, 2005). There exist a seemingly endless variety of group interventions (Wanlass et al., 2005) with no published papers presenting a compilation of evidenced-based group therapy for the adolescent population. This scoping review seeks to address that gap.

**Method**

A scoping study methodology was selected to examine the breadth of available evidence in relation to group models for adolescents living with an eating disorder. The author followed the procedure outlined by Arksey and O’Malley (2005). The purpose of applying a scoping study framework was to map available evidence, summarize research findings, identify research gaps, and to determine the value of undertaking a systematic review. The framework provided by Arksey and O’Malley facilitated this process. The stages of this research included the following: identifying the research question, identifying relevant studies, study selection, charting the data, collating the data, summarizing the data, and reporting the results.

In April and May 2013, an exhaustive search of the literature was conducted to identify studies that responded to the question: What evidence exists to support the use of group therapy for adolescents living with an eating disorder? For the purposes of this research, “group therapy” is defined as “a meeting of two or more people for a common therapeutic purpose or to achieve a common goal” (Centre for Substance Abuse Treatment, p. xxv). The World Health Organization’s (2013) definition of “adolescents” was selected as it is internationally recognized and specifies an age range of 10 to 19 years. Finally, “eating disorders” was defined according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association [APA], 2000). This includes AN, BN, EDNOS, and BED.

The primary method of data search involved controlled vocabulary and keyword searches (Table 1). The thesaurus and subject terms in each database were used to modify the keywords. In all, 11 electronic databases and 5 gray literature databases were searched for articles published between 2003 and 2013. Articles obtained from the databases were reference checked for related studies. Second, websites of 28 key organizations were hand searched. The author searched these websites to identify “hidden” sources of knowledge on the subject matter. These websites included the National Eating Disorder Collaboration, the Cochrane Library, and the Campbell Collaboration. Third, the author conversed with professionals from Eating Disorders Victoria and the Butterfly Foundation. Three librarians from the University of Melbourne were also consulted.

Studies were selected based on their capacity to respond to the research question (Figure 1). The reviewer made selections by filtering articles based on their title and abstract. If studies met the inclusion criteria, the full texts were reviewed. The search yielded 526 references from academic databases and 191 results from gray literature databases. The reviewer identified 11 studies that met the inclusion/exclusion criteria and responded to the research question. Included studies were scanned for the following information: sample details, research methods, intervention type, outcomes, and study context. The data were extracted and charted as shown in the appendix.

**Results**

**Mapping the Results**

The studies were derived from national and international sources with the majority of research in this area stemming from Europe. Five of the studies were conducted in England, two in Germany, one in Spain, one in Italy, and one in Denmark. One Australian study was included in this review (Goldstein et al., 2011).

The most frequent use of group therapy found in this study occurred in an outpatient or day program setting and the least frequent use of groups took place in an inpatient setting. It is important to note that the group models from the various geographical locations were also delivered within differing health care systems. This was not exclusively commented upon within the literature.
Table 1. Search Strategy.

Search terms

Eating disorder\* OR Anorexia OR bulimia OR eating disorder not otherwise specified OR binge eating disorder AND Group\* OR group therapy, OR group work OR group psychotherapy OR support group OR group treatment OR group course\* OR group intervention AND Teen\* OR adolescent\* OR young people OR youth OR young women OR young men

Inclusion criteria

- Reported quantitative studies or qualitative findings
- Publication dates between 2003 and 2013
- Concerned with group interventions for eating disorders
- Population aged 10 to 19 years
- English language

Exclusion criteria

- Population aged >19 years or <10 years

Resources searched

- Medline
- CINAHL
- PsycARTICLES
- PsycINFO
- Web of Science
- SCOPUS
- ERIC
- Global Health
- Health Source
- AustHealth
- ASSIA

Gray search

- Mednar
- Opengrey
- Grey Matters
- Grey Literature Report
- Reference check conducted
- 28 website searches
- Professional consultation

Figure 1. Selection flowchart.
Sample Characteristics

All participants were aged between 11 and 19 years. Of the 377 adolescents across all studies, only 11 were male. Illness duration and treatment history were rarely reported with only 3 of the 11 studies providing these data. The reported range of illness duration in these studies was from 2 to 6 years (Prestano, Lo Coco, Gullo, & Lo Verso, 2008; Pretorius et al., 2012; Wood, Al-Khairulla, & Lask, 2011). None of the studies provided information on participants’ ethnicity or cultural background. Attrition was noted as a key issue for most studies with rates of up to 37% being reported (Hollesen, Clausen, & Rokkedal, 2013)

Most studies included mixed samples of varying diagnoses. All 11 studies discussed the treatment of AN; 4 discussed the treatment of BN; 4 discussed the treatment of EDNOS; and none discussed the treatment of BED.

Research Methods

In the past 10 years, there have been no published randomized-controlled trials (RCTs) investigating the use of group therapy for adolescents living with an eating disorder. The most rigorous studies on this topic area are program evaluations. All program evaluations sought to measure outcomes by assessing a decrease in eating disorder symptomatology, and there were 26 different measurement tools noted across all studies. The most commonly used outcome measure was body mass index (BMI; Goldstein et al., 2011; Hollesen et al., 2013; Lazaro et al., 2011; Prestano et al., 2008; Pretorius et al., 2012; Salbach-Andrae, Bohnenkamp, Pfeiffer, & Lehmkuhl, 2008). Other common measurement tools included the following: the Self-Esteem in Eating Questionnaire (SEED; Lazaro et al., 2011; Prestano et al., 2008), the Eating Disorder Inventory 1 (EDI; Hollesen et al., 2013; Prestano et al., 2008), and the Eating Disorder Inventory 2 (EDI-2; Goldstein et al., 2011; Salbach-Andrae et al., 2008).

Interventions

Seven different types of group interventions were identified through this review, including transition program, DBT, MFT, friends group, cognitive remediation therapy (CRT), group analytic therapy (GAT), and social skills and self-esteem (SSE) groups. These interventions were described and/or evaluated in each study.

The most common intervention in the literature was MFT; however, the models of this therapy varied in each study. Scholz, Rix, Scholz, Gantchev, and Thomke (2005) presented a MFT model aimed at symptom reduction and strengthening family relationships. This approach is aligned with the Maudsley Model, which is fast becoming the preferred treatment approach of adolescent AN (Lock & Fitzpatrick, 2009). Nesbitt and Uprichard’s (2009) model differed from that of Scholz et al.’s, in that its aims were geared toward the development of mutual support and empowerment as opposed to specific symptom reduction. Similarly, Honig’s (2005) MFT held a supportive and collaborative focus in recognition of the expertise of families with a lived experience. The final MFT model located for this review was focused on encouraging the reflective process and building positive relationships (Hollesen et al., 2013).

The second most common intervention was CRT. Wood et al.’s (2011) CRT group was based on a manualized treatment for adult individuals living with AN (Tchanturia, Davis, Reeder, & Wykes, 2010). Similarly, the CRT model presented by Pretorius et al. (2012) was an adaptation of a group CRT model for adults with AN (Genders & Tchanturia, 2010). Both models of CRT aimed to improve various cognitive domains through the use of games and puzzles. However, the models differed in the frequency and duration of treatment: 6 hr over 6 weeks (Wood et al., 2011) compared with 3 over 4 weeks (Pretorius et al., 2012).

The other interventions found through this review existed in isolation; that is, only one model of each intervention was presented. The GAT group model aimed to improve self-esteem and to increase participant’s awareness of the relationship between emotions and behavior (Prestano et al., 2008). Lazaro et al.’s (2011) SSE group was based on a CBT intervention that aimed to reduce anxiety and build confidence. Similarly, Davies’s (2004) friends group aimed to reduce social withdrawal and build the participants’ relationship skills. The DBT group focused on improving emotional regulation skills and decreasing eating disorder behaviors such as restrictive eating and purging (Salbach-Andrae et al., 2008). Goldstein et al.’s (2011) transition program comprised of several different group therapies, including CBT, narrative therapy, art therapy, healthy lifestyle group, nutrition group, social eating group, and parents group. The program offered a holistic approach with each group aimed at supporting recovery and improving eating disorder symptomatology.

Treatment Duration

The duration of treatments varied significantly with a range between 4 weeks and 2 years reported. Similarly, the frequency and duration of sessions differed in each study. The CRT group (Pretorius et al., 2012) had the lowest number of treatment contact hours (3 hr total), whereas the transition program (Goldstein et al., 2011) had the highest number of contact hours (approx. 200 hr).

Outcomes

The type of outcome data reported varied depending upon the aims of each study. The outcomes can be categorized as biological, psychological, relational, and behavioral. These multidimensional categories have been chosen as they reflect
the various components of eating disorder recovery (Tosh et al., 2010). Diagnosis-specific outcomes are also presented to highlight what is known about group treatment approaches for specific eating disorders.

**Biological Outcomes**

Biological outcomes were measured across six studies by pre/post-BMI calculations, with one study using ideal body weight percentage (Ideal body weight% [IBW%]) as an adjunct to BMI (Goldstein et al., 2011). The 25-week course of DBT (Salbach-Andrae et al., 2008) saw the greatest change in BMI with a mean increase of 2.5 for all adolescents treated for AN. A mean post-test BMI score for BN was not provided. Both the GAT (Prestano et al., 2008) and SSE groups (Lazaro et al., 2011) resulted in a mean BMI increase of 0.9, whereas the CRT group saw a mean increase of 0.5. Research on the transition program found that 15 of the 26 participants who completed treatment maintained a body weight percentage at or above 85% of their ideal weight (Goldstein et al., 2011). The MFT outcomes were not reported using mean BMI data; however, the authors reported that treatment was found to have medium effects ($d > 0.5$) in relation to BMI (Hollesen et al., 2013).

**Psychological Outcomes**

Lazaro et al. (2011) found that structured group therapy for self-esteem improved adolescents’ perception of body shape and weight, perception of physical appearance, their happiness and satisfaction, and their self-concept related to others. Of the 20 young people who completed Hollesen et al.’s (2013) MFT group, eating disorder symptomatology was greatly reduced and the participant’s interoceptive awareness improved. Following treatment, 13 of the adolescents were in remission, 1 met the criteria for AN, and 1 met the criteria for BN.

A 2-year course of weekly GAT found that those with higher psychological disturbance had poorer outcomes (Prestano et al., 2008). However, following treatment, four adolescents had recovered and one was in remission. Process measures revealed an increased commitment to therapy among those living with AN. This commitment to therapy was not observed for the adolescents in the group living with BN.

Wood et al. (2011) described their CRT group model as targeting the participants’ neuropsychological deficits. The authors’ clinical observations suggest that this type of group therapy may facilitate cognitive flexibility and enhance participant’s capacity to see “the bigger picture.” Pretorius et al. (2012) found that four sessions of CRT resulted in a small yet positive effect on the adolescents’ self-reported cognitive flexibility. While the effect size was small and motivation for recovery remained stagnant, the researchers posited an increased effect size with additional sessions. Motivation for recovery also remained unchanged for adolescents completing the transition program (Goldstein et al., 2011). It was found that those who completed the program had a significant change in attitudinal symptomatology and a decrease in perfectionism.

The MFT model put forth by Scholz et al. (2005) was reportedly successful in generating hope and reducing stigma and isolation. Similarly, the experiential model of MFT (Nesbitt & Upchurchard, 2009) facilitated the development of a strengths-based dialogue, while the friends group improved participant’s self-esteem (Davies, 2004).

**Relational Outcomes**

The SSE groups saw a decrease in social withdrawal of participants and an increase in leadership (Lazaro et al., 2011). However, the researchers investigating MFT did not find the expected reduction in interpersonal difficulties (Hollesen et al., 2013). Relational outcomes were not explicitly measured in other program evaluations.

The friends group was designed to address friendship issues that emerged for adolescents who were hospitalized as a result of AN (Davies, 2004). The author reports that the group was successful in assisting participants to overcome isolation and relearn how to engage and eat with others. The feedback provided by participants suggests that the group enhanced their social skills and eased their transition back into the school setting.

The most well-received adaptation of MFT appeared to be based on a model put forward by Scholz et al. (2005) for the treatment of adolescent AN. The author reports success for most participants in generating solidarity. This contrasts the strengths-based MFT group where clinicians and families noted improved relational capacity, while adolescents found it less useful (Nesbitt & Upchurchard, 2009).

**Behavioral Outcomes**

With group DBT, it was observed that 5 of the 11 participants who completed treatment achieved remission (Salbach-Andrae et al., 2008). The authors describe DBT as targeting eating disorder behavioral symptoms such as calorie restriction, excessive exercising, laxative use, food restriction, body checking, purging, binge eating, and diet pill use. The study found that there was a reduction of these behavioral symptoms in all participants with varying diagnoses. However, those with co-morbid mental health issues were less likely to reach remission. The transition program also notes behavioral change as a key outcome (Goldstein et al., 2011). However, the authors do not discuss the specific behavior changes observed in the participants.

**Diagnostic-Related Outcomes**

While four studies included adolescents living with EDNOS in their overall sample, no studies reported specifically on outcomes for these illnesses. Participants diagnosed with
EDNOS were subcategorized as restricting/AN subtype or binge-purge/BN subtype. Thus, outcomes for those with EDNOS varied depending upon the individual’s proximity to an AN or BN diagnosis.

GAT was found to be more beneficial for the treatment of AN than for the treatment of BN (Prestano et al., 2008). The SSE groups were less likely to benefit adolescents living with AN compared with those with BN (Lazaro et al., 2011). DBT resulted in higher remission rates for participants with AN (Salbach-Andrae et al., 2008). Similarly, research on the transition program suggests that this model of treatment may lead to change in behavioral and attitudinal measures of eating pathology for adolescents living with AN (Goldstein et al., 2011).

GAT was less successful for adolescents living with BN (Prestano et al., 2008). The researchers theorized that this was perhaps a result of the analytic technique, which does not provide explicit advice about symptom management. In contrast, Lazaro et al. (2011) found that those living with BN were more likely to benefit from CBT-based self-esteem and social skills groups.

**Discussion**

A review of the literature revealed several key themes. Themes were selected for discussion based on their capacity to address the research question. Similarly, themes that suggested gaps in the literature were included for discussion to highlight areas for future research.

**Evidence of Effectiveness**

The 11 studies in this review have described various group interventions that show promise in the treatment of adolescents living with an eating disorder. However, it was found that there is a lack of rigorous research demonstrating effectiveness of these interventions. This is surprising given the ubiquitous nature of group treatments. While program descriptions and program evaluations provide insight on group treatment approaches, they make no claim to effectiveness.

**Measuring Outcomes**

The review provided support for the use of seven group models, all of which assert different treatment aims and mechanisms of change. The differing aims and treatment approaches led to a multiplicity of outcome measures capturing different aspects of change in the lives of the participants.

The most frequent outcome measure was BMI, which suggests the primacy of biological recovery markers in eating disorder treatment. This may be a misleading measure of recovery as weight gain does not equate to psychological recovery or eating disorder severity. As evidenced in two studies (Hollesen et al., 2013; Salbach-Andrae et al., 2008), an increased BMI may only serve to change the adolescents diagnosis from AN or BN to EDNOS. The medical model may be implicated in the emphasis on weight-related biological outcomes. The recovery paradigm (Commonwealth of Australia, 2009) provides the rationale for an increased emphasis upon psychosocial outcome measures.

The author captured the variety of treatment aims and outcomes across all studies by reviewing the results from a biological, psychological, relational, and behavioral perspective. While the stated biological outcomes were all weight-related, the psychological, relational, and behavioral outcomes varied depending upon the aims of treatment. In addition to BMI, 25 different tools were used to measure change in the psychological, relational, and behavioral domains. This plethora of tools aimed at measuring various eating disorder symptoms acknowledges that one-dimensional change cannot accurately capture the recovery process (Tosh et al., 2010).

**Interventions**

While CBT appears to be the most common treatment approach for adult eating disorders (Keel & Haedt, 2008), MFT is the most frequently documented in the literature on group approaches for adolescents. The interest in MFT may stem from findings related to FBT in the treatment of young people with AN (Keel & Haedt, 2008) and BN (Le Grange, Crosby, Rathouz, & Levental, 2007). MFT is also an approach that acknowledges the role of the family system in a young person’s recovery (Scholz et al., 2005). While MFT demonstrated potential in the treatment of adolescents living with AN (Hollesen et al., 2013), CBT was found to be more beneficial for those living with BN (Lazaro et al., 2011). This is consistent with the findings for BN among the adult population (Brownley et al., 2007; Polnay et al., 2013; Zimpfer, 1990).

Research on CRT, DBT, SSE, the transition program, and the friends group has demonstrated a variety of differing approaches in treating adolescents living with an eating disorder. The research context for the treatment of adult eating disorders points to the potential for other group models such as IPT (Agras et al., 1995) and motivational interviewing (Touyz et al., 2003). Research on older populations can act as a guide for future development in the treatment of young people. The interventions included in this review can also provide a foundation for future research and clinical practice.

**Attrition**

Attrition was noted as a key issue across eight of the studies found through this review. Attrition was generally described across all studies relative to those participants who did not complete the course of treatment, with the study by Hollesen et al. (2013) treating those who did not complete the
questionnaires and interviews as dropouts. High attrition rates have been found to be a pervasive problem in eating disorder treatment contexts (Neeren et al., 2010; Stein, Wing, Lewis, & Raghunathan, 2011). Several studies have been conducted to explore patterns of attrition; however, few have managed to accurately predict attrition rates in study participants (Abdelbaky, Hay, & Touyz, 2013). Hollesen et al. reported a 37% attrition rate, which was largely attributed to patients who did not complete diagnostic interviews and questionnaires. Salbach-Andrae et al. (2008) had the lowest attrition rate of 8%; however, they did not discuss why the individuals dropped out of treatment. Pretorius et al. (2012) noted that previous CRT studies demonstrated low attrition rates; however, their research resulted in one fifth of participants dropping out. Some research suggests that attrition may be associated with a diagnosis of AN (Abdelbaky et al., 2013). This may shed light on the high attrition rates found in this review as AN was the most common diagnosis across all studies. In addition to this, engagement is central in supporting strong therapeutic relationships and outcomes for treatment-seeking individuals (Thompson, Bender, Windsor, & Flynn, 2009). Adolescents display a particularly high rate of disengagement and early termination (Thompson et al., 2009). Further research is needed to explore patterns of attrition for adolescents living with an eating disorder.

**Missing Populations**

While EDNOS and BED are estimated to be the most prevalent eating disorders (Deloitte Access Economics, 2012), most research participants carried a diagnosis of AN. Therefore, outcomes noted in these studies are more likely to reflect the efficacy of these treatment approaches with AN populations. The lack of research on BED may be attributed to its recent recognition as a diagnosis distinct from EDNOS. A wider range of participants with differing diagnoses should be included in future studies to determine what works for individuals living with a diagnosis other than AN.

Cultural factors were not discussed in any of the papers and the cultural backgrounds of participants remain unknown. Franko and George (2006) pointed to the influence of culture and ethnicity upon the experiences of those in eating disorder group therapy. This suggests the merit of considering cultural factors in future research. Similarly, what became apparent in reviewing the literature was that males were a minority. This may reflect the broader prevalence statistics and the findings that males are less likely to seek treatment for an eating disorder (Deloitte Access Economics, 2012). More research on cultural factors and male populations is required to better understand the needs of these groups.

**Adverse Effects**

While MFT (Scholz et al., 2005) and the friends group (Davies, 2004) promoted positive relational outcomes, the emergence of unfavorable group dynamics was also documented (Davies, 2004; Wood et al., 2011). This mirrors Vandereycken’s (2011) concerns regarding competition, comparison, and social contagion in group therapy settings. Davies commented upon the development of unhelpful alliances between individuals and the development of competition between individuals. Competitiveness, perfectionism, and low self-esteem among group members may exacerbate eating disorders and jeopardize recovery (Vandereycken, 2011). Similarly, Wood et al. (2011) commented upon the development of unhelpful group dynamics that negatively affected the treatment group. Given the influence of peers upon adolescents (Gusella, 1999), the risk of unhelpful alliances, competitiveness, and social contagion may be particularly salient for the treatment of this client group. Further research on the positive and negative effects of group therapy for adolescents is needed to reduce the potential harms of this treatment approach.

**Limitations**

There are several limitations of this study. First, scoping studies do not appraise the evidence included for review. Therefore, the findings of this article can only be considered to be descriptive rather than evaluative. Second, thematic analysis is subjective, and this must be taken into account when reviewing the findings. Third, the diagnostic criteria for eating disorders have changed since the introduction of the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; APA, 2013). This limits the application of research outcomes to the newly defined eating disorders. Finally, this study was conducted by a single reviewer and the author notes selection bias as a key limitation of this review.

**Gaps and Recommendations**

The results of this scoping review indicate that there is an overall lack of research on group therapy for adolescents living with an eating disorder. The findings suggest a need for RCTs to test the validity of outcomes for all group therapy models in this review. Program evaluations may serve as the next step to establish outcomes for the program descriptions. There is also a need to build an evidence base to support the use of the many group therapy models used in practice that remain untested. Research on adult populations may act as a guide for directing future studies on adolescents. A systematic review may further inform research directions.

There are no studies investigating group treatments for BED, and few measuring outcomes for EDNOS and BN. With the addition of BED to the *DSM-5* (APA, 2013), research needs to direct efforts toward establishing effective group treatments for this illness. Similarly, group models for EDNOS, BN, and AN require further research.

Males were rarely included in studies and there was an overall lack of discussion about the needs of culturally and linguistically diverse individuals. Research on group models
treating adolescent males and culturally and linguistically diverse individuals is needed to understand the needs of these populations in a group treatment setting.

Finally, attrition and adverse treatment effects were noted as key issues across the studies included in this review. Gaining an understanding of the patterns that predict attrition may strengthen engagement and improve outcomes for adolescents living with an eating disorder. Similarly, research exploring unhelpful group dynamics is needed to reduce the likelihood of iatrogenic harms.

**Conclusion**

This review suggests that there is a gap in the literature regarding the effectiveness of group therapy for adolescents living with an eating disorder. There appears to be an assumption of efficacy, which is surprising in an era of evidence-based practice. Program evaluations are currently the highest level of evidence in this area, with program descriptions suggesting the value of undertaking more rigorous research. The program evaluations suggested the utility of group therapy for promoting weight restoration in underweight individuals living with an eating disorder. Specifically, MFT showed potential in the treatment of AN, whereas CBT showed promise for adolescents living with BN. The following recommendations were made to inform the direction of future research: (a) conduct RCTs to establish a stronger body of evidence, (b) research group outcomes for all eating disorders with particular attention to BED, (c) investigate group programs in the treatment of males and culturally and linguistically diverse populations, (d) explore patterns of attrition, and (e) examine unhelpful dynamics that emerge in group treatment contexts. There is still much to be known, and it is hoped that these recommendations spark the interest of researchers looking to make a meaningful contribution to the field of eating disorders.

**Appendix**

**Data Chart.**

| No. | Author: Lazaro et al. (2011) | Study details | Sample | Research method | Intervention | Outcomes | Context |
|-----|-----------------------------|---------------|--------|----------------|-------------|---------|---------|
| 1   | Overall: 160 AN (95), BN (28), EDNOS (37) | Program evaluation Pre- and post-test Self-report | Structured group therapy for self-esteem and social skills (CBT-based) | Eight adolescents per group Duration: 8 weeks (8 × 90 min sessions) | Improved perception of appearance, self-concept, happiness and satisfaction, social withdrawal and leadership. | Country: Spain Context: Day program |
| 2   | Author: Prestano, Lo Coco, Gullio, and Lo Verso (2008) | Overall: 8 AN (3), BN (5) Age: 13-17 Attrition: 2 (BN) | Program evaluation Pre- and post-test Mixed methods Self-report | Group analytic therapy Duration: 2 years (90 min weekly) | Four recovered, one remission, one deteriorated. BN patients less likely to benefit than those with AN. | Country: Italy Context: Outpatient |
| 3   | Author: Pretorius et al. (2012) | Overall: 30 AN (17), EDNOS (7) Age: 12-17 Attrition: 6 | Program evaluation Pre- and post-test Mixed methods Self-report | Cognitive remediation therapy Four to six participants in each group Duration: 4 weeks (4 × 45 min sessions) | Small effect size in self-reported cognitive flexibility post-group. 0.5 mean BMI increase for sample. | Country: England Context: Day program |
| 4   | Author: Hollesen, Clausen, and Rokkedal (2013) | Overall: 32 AN (14), EDNOS BN (18) Age: 12-17 Attrition: 12 | Program evaluation—Pilot study Pre- and post-test Self-report Comparison group: None | Multiple family group therapy Six to seven participants and their families split into five groups Duration: 1 year (12 days) | Thirteen free of diagnosis, one with AN, five with EDNOS, one with BN. Improvement in BMI, reduction in restriction, eating and weight concern, exercise and drive for thinness. | Country: Denmark Context: Outpatient |
| 5   | Author: Salbach-Andrae, Bohnekamp, Pfeffer, and Lehmkuhl (2008) | Overall: 12 AN (6), BN (6) Age: 12-18 Attrition: 1 (BN) | Program evaluation Mixed methods Pre- and post-test Self-report | Dialectical behavior therapy + group therapy Duration: 25 weeks (25 × 50 min psychotherapy sessions + 25 × 100 min group sessions) | Five free of ED diagnosis, one AN, three BN, two EDNOS. All AN BMI increased. | Country: Germany Context: Outpatient |
| 6   | Author: Goldstein’s et al. (2011) | Overall: 28 AN (78.6%) EDNOS (21.4%) Age: 12-18 Attrition: 2 | Program evaluation Pre- and post-test Self-report | Transition Program: Multidisciplinary monitoring + Group work. Duration: 10 weeks/30 sessions (3 × 6 hr sessions weekly) + 1 month and 6 months follow-up | Significant change emerged on measures of weight gain, and behavioral and attitudinal measures of eating pathology. 10 adolescents needed additional inpatient care due to compromised medical status | Country: Australia Context: Day Program |

(continued)
Appendix (continued)

| No. | Study details | Sample | Research method | Intervention | Outcomes | Context |
|-----|---------------|--------|-----------------|--------------|----------|---------|
| 7   | Author: Wood, Al-Khairulla, and Lask (2011) | Overall: 9 | Program description | Cognitive remediation therapy—task-based Therapist: 2 × facilitators (one leading, one documenting) Duration: 6 weeks/10 sessions total—4 weeks (8 × 30 min biweekly sessions), then 2 weeks (2 × 45- to 60 min sessions) | Participants reported this model to be fun and useful Negative experiences included boredom, repetition, and unfavorable group dynamics. | Country: England Context: Inpatient |
| 8   | Author: Davies (2004) | Overall: N/A | Program description | The friends group—flexible structure that aims to support peer interaction. Duration: 10 weeks (10 × 60 min sessions). | Patient feedback has been positive. Patients perceived the group as useful. Unhelpful alliances influenced group dynamics. | Country: England Context: Inpatient |
| 9   | Author: Honig (2005) | Overall: 11 | Program description | Multifamily group therapy. Maximum of four families per group Duration: 8 weeks (8 × 3.25 hr sessions including lunch in group) Open format | Adolescent feedback was often less positive than that of families and staff. Families and staff rated program positively. | Country: England Context: Inpatient |
| 10  | Author: Scholz, Rix, Scholz, Gantchev, and Thomke (2005) | Overall: 110 (sample of 30 provided feedback) | Program description | Multifamily group therapy. Six to eight families per group. Duration: 12 months (20 days × 6.5 hr)—1 × intensive 6.5 hr/5 days and then 6.5 hr/2 days a week) | Observed effects of this approach include learning from other families’ experiences, overcoming isolation and stigma, creating solidarity and hope. | Country: Germany Context: Day program |
| 11  | Author: Nesbitt and Uprichard (2009) | Overall: 5 | Program description | Multifamily group therapy Duration: 7 weeks/4 sessions (2 × evening session + 2 full-day sessions) | Strengths-based dialogue was developed. Experiential exercises helped family members to interact positively. | Country: England Context: Outpatient |

Note: AN = Anorexia nervosa; BN = bulimia nervosa; ED = eating disorder; EDNOS = eating disorder not otherwise specified; BMI = body mass index. N/A = not applicable; CBT = cognitive behavioral therapy.

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