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Health and Disability

You are not alone – adolescents' experiences of participation in a structured skills training group for ADHD

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Little is known about how adolescents with attention deficit/hyperactivity disorder (ADHD) experience participating in group therapy, an important factor to consider when developing treatment methods for this age group. This study aimed to explore how adolescents with ADHD experience participating in a structured skills training group program based on dialectical behavioral therapy. Semi-structured interviews were conducted with 20 adolescents (15–18 years of age) with ADHD after participating in a structured skills training group. The interviews were transcribed verbatim and qualitative content analysis were used to analyze the text. The participants emphasized the value of meeting other adolescents with ADHD and the opportunity to exchange experiences, strategies and tips. Participating in the group treatment made the adolescents realize that they were not alone, and feelings of togetherness and an increased acceptance of themselves were described. The participants associated the treatment with elevated knowledge and understanding, for example, about ADHD, their own functioning and helpful strategies. They also described emotional and behavioral changes, such as higher self-esteem, fewer interpersonal conflicts and improved concentration. Activating and experiential exercises were considered important elements of the treatment, and the participants expressed a need for a variation of exercises, as well as more time for practicing skills, discussions and breaks. The results indicate that the group format add an extra value to the treatment and that the use of an active approach throughout the treatment is of importance for this group of patients.

Key words: ADHD, adolescents, dialectical behavior therapy, group treatment, qualitative research.

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INTRODUCTION

Attention deficit/hyperactivity disorder (ADHD) is a neurodevelopmental condition characterized by symptoms of inattention, hyperactivity, and impulsivity, resulting in impairments in everyday life (American Psychiatric Association [APA], 2013). ADHD in adolescence is associated with psychiatric, academic, interpersonal, and social problems (Barkley, Fischer, Edelbrock & Smallish, 1990; Sibley, Evans & Serpell, 2010; Smalley, McGough, Moilanen, Loo, Taanila & Ebeling, 2007) as well as with feelings of embarrassment and shame about having ADHD and of being perceived by peers as "disabled" (Sikirica, Flood, Dietrich, Quintero, Harpin & Hodgkins, 2015). In addition, an ADHD diagnosis before the age of 18 is associated with several negative long-term outcomes, including an increased risk of psychiatric comorbidity, substance use, criminality, academic failure, and unemployment (Erskine, Norman, Ferrari, Chan, Copeland & Whiteford, 2016). Adolescence is a period marked by rapid developmental changes in which individual vulnerability to mental illness often begins to express itself (Schulenberg, Sameroff & Cicchetti, 2004). Given the negative impact of ADHD on several domains in an adolescent's life, it is imperative to develop treatments for this age group that is both acceptable and effective to minimize deviating outcomes.

Most studies on ADHD treatment involve pharmacological treatment in which both stimulant (e.g., methylphenidate and amphetamine) and non-stimulant (e.g., atomoxetine) medication have been shown to reduce the core symptoms of ADHD in children and adolescents (Banaschewski, Coghill, Santosh, Zuddas, Asherson & Buitelaar, 2006; Chan, Fogler & Hammerness, 2016; Findling, 2008; Greenhill, Kollins, Abikoff, McCracken, Riddle & Swanson, 2006). However, not all patients respond to pharmacological treatment (Elliott, Blasey, Rekshan, Rush, Palmer & Clarke, 2017) and common side effects (e.g., stomach aches and sleep problems) from ADHD medication have been reported (Storebø, Pedersen, Ramstad, Kielsholm, Nielsen & Krogh, 2018). In addition, recurrent discontinuation of the treatment, especially among adolescents, has been documented (Zetterqvist, Asherson, Halldner, Långström & Larsson, 2013). Moreover, there are uncertain long-term effects of pharmacological therapy (Charach, Ickowicz & Schachar, 2004; Molina, Hinshaw, Swanson, Arnold, Vitiello & Jensen, 2009; Murray, Arnold, Swanson, Wells, Burns & Jensen, 2008). Corroborating this potential problem, clinical guidelines recommend non-pharmacological treatments as a complementary or first-line treatment for adolescents with ADHD, including cognitive behavioral therapy (CBT) that targets social skills, problem solving, and emotional regulation (National Institute for Health & Clinical Excellence [NICE], 2008, 2018). The Swedish National Board of Health and Welfare (2014) suggest that group treatment and the opportunity to meet others with similar challenges are of particular importance to adolescents with ADHD who may struggle with accepting their diagnosis. Although some studies show promising results for CBT for adolescents with ADHD, both in group and individual formats, findings to date are

Table 1. *Description of the themes and contents of the sessions in the treatment*

Session	Themes and contents
1.	*Introduction*: information about the treatment and psychoeducation about ADHD.
2.	*Neurobiology and mindfulness I*: neurobiology of ADHD and introduction to mindfulness. Thereafter, mindfulness training is included in all sessions.
3.	*Homework and mindfulness II*: rational for the use of homework in the treatment. Strategies for accomplish home assignments is discussed.
4.	*Acceptance and mindfulness III*: acceptance is introduced and practiced.
5.	*Chaos and control*: discussion about difficulties in organization and planning. Strategies for how to manage these difficulties are introduced and practiced.
6.	*Emotions*: learning about emotions, including practice in identifying, observing and describing emotional signals in order to better manage emotions.
7-8.	*Behavioral analysis*: introduction to behavioral analysis. Strategies to find alternative behaviors are discussed, practiced and applied on own examples. Behavioral analysis is thereafter used throughout the treatment.
9.	*Medication, mental illness, and how to increase wellbeing*: information about pharmacological treatment for ADHD. Symptoms of depression and other emotional problems are discussed. Information and discussions about treatment options and preventive strategies.
10.	*Impulsivity, risk behaviors and addiction*: symptoms of addiction and other forms of risk behaviors are discussed. Practice in identifying, describing and regulating impulsive behaviors.
11.	*Stress*: physiological reactions of stress and the relation between stress and performance are introduced. Practice in identifying and learning about own personal stress and strategies for stress management.
12-13.	*Self-esteem and relationships*: differences between self-esteem, self-confidence and self-respect are clarified, including the impact of ADHD on these areas. Social skills are taught and practiced.
14.	*Retrospect and outlook*: The participants summarize their experience of the group treatment, evaluate their own progress and plan for how to continue their work outside the treatment.

Note: ADHD Attention-deficit/hyperactivity disorder.

somewhat ambiguous and inconsistent (Boyer, Geurts, Prins & Van der Oord, 2015; Kemper, Maslow, Hill, Namdari, Allen LaPointe & Goode, 2018; Vidal, Castells, Richarte, Palomar, Garcia & Nicolau, 2015). In addition, there is some debate as to whether group-based treatment is useful for adolescents with ADHD (NICE, 2008; Vidal *et al*., 2015).

A structured skills training group program based on dialectical behavioral therapy (DBT), which focuses on emotional regulation, mindfulness, behavioral analysis, and social skills, has been developed for adult patients with ADHD (Hesslinger, Philipsen & Richter, 2004, 2010; Hesslinger, Tebartz van Elst, Nyberg, Dykierek, Richter & Berner, 2002). This method has been evaluated in open design studies (Hesslinger *et al*., 2002; Morgensterns, Alfredsson & Hirvikoski, 2016; Philipsen, Richter, Peters, Alm, Sobanski & Colla, 2007) as well as randomized control trials (Hirvikoski, Waaler, Alfredsson, Pihlgren, Holmström & Johnson, 2011; Philipsen, Jans, Graf, Matthies, Borel & Colla, 2015), with some promising results. However, these studies did not include any qualitative analysis on how the participants experienced the group treatment, which may add a more in-depth perspective and understanding of how the group format and the treatment is perceived. In addition, this method has not yet been adapted and evaluated for adolescents with ADHD.

How adolescents with ADHD experience their participation in a psychological group treatment in general and in a DBT-based skills training group in particular, remains to be explored. This might be an important piece of the puzzle in developing interventions that could be accepted and appreciated by this age group. Thus, this study aimed to use a qualitative approach to explore how adolescents with ADHD experience participating in a structured skills training group program based on DBT and adapted for adolescents.

METHOD

Treatment

The structured skills training group was based on an manualized DBT-based group program originally developed in Germany (Hesslinger, Philipsen & Richter, 2004; Hesslinger *et al*., 2002) for adults with ADHD and later translated and evaluated in Sweden (Hesslinger, Philipsen & Richter, 2010; Hirvikoski *et al*., 2011). The structured skills training group were adapted to be used for adolescents with ADHD and consisted of 2-hour 14-weekly sessions (Meyer, Ramklint, Hallerbäck, Lööf & Isaksson, 2019). Every session had its own theme (Table 1), including discussions and exercises; the themes were presented to the participants in a PowerPoint and a workbook. Themes specific for DBT, such as mindfulness, acceptance, and behavioral analysis, were continuously practiced during the treatment sessions. Some adaptations such as simplified language, more practical exercises and less theory were made to make the treatment more applicable to the younger age group.

Participants

A purposive sampling was used to select adolescents with a clinical diagnosis of ADHD/attention deficit disorder [ADD]/ADHD not otherwise specified and who participated in the structured skills training group. The participants in this study came from four treatment groups from two child and adolescent psychiatric outpatient units in Sweden in 2016–2017. At first, the adolescents were informed about the interview study by the group leaders. The adolescents were later contacted via telephone by one of the researchers who provided more information about the study. Of 21 eligible adolescents, one declined participation and indicated lack of time as a cause. Thus, 20 adolescents aged 15–18 years were included in the study (12 girls and 8 boys, mean age 16.3 years). The diagnosis of ADHD was validated by clinical psychologists using the Mini-International Neuropsychiatric Interview for Children and Adolescents (MINI-Kid) (Sheehan, Sheehan, Shytle, Janavs, Bannon & Rogers, 2010). Of the participating adolescents, 16 reported current ADHD medication. Clinical characteristics of the participants are presented in Table 2.

Table 2. *Sample characteristics of the adolescents treated for ADHD*

All participants, n	20
Females, n	12
Age Mean, range	16.30, 15–18
Clinical diagnosis, n	ADHD = 13 ADD = 5 ADHD (NOS) = 2
ADHD medication[a], n	16
Number of sessions attended, Mean, range	12, 8–14

Notes:: *ADHD* Attention-deficit/hyperactivity disorder, *ADD* Attention deficit disorder, *ADHD (NOS)* Attention-deficit/hyperactivity disorder not otherwise specified.
[a]Methylphenidate, atomoxetine, lisdexamfetamine or guanfacine.

Written informed consent was obtained from all participants and the study was approved by the Ethical Review Board of Uppsala University (Reg no. 2015/257). The consolidated criteria for reporting qualitative studies (COREQ) were considered when designing and reporting the study (Tong, Sainsbury & Craig, 2007).

Interviews

Semi-structured interviews were conducted using an interview guide constructed for this study that covered the participants' experiences of participating in the structured skills training group. The interview guide included the following questions: *How did you experience participating in a group? What did you appreciate with the treatment? What did you dislike with the treatment? Did the treatment result in any changes? What aspects of the treatment will you benefit from? Should anything in the treatment be different?* Follow-up questions were asked when appropriate and visual support (e.g., themes of the treatment) were used to help the participants remember the content. The interviews were audio recorded and lasted for about 20–60 minutes, and then transcribed verbatim and pseudonymized with a case id. The interviews were conducted 1–2 weeks after the end of the final group session. The interviews were performed by two graduate students (one in psychology and one in medicine) who were trained in communication skills. The interviewers did not participate in the treatment, had no prior relationship to the participants, and were trained in interviewing techniques by one of the authors (CÖ) who is well experienced in this method. The interviews took place at the outpatient units where the group treatment was held, except for one interview that was conducted through Skype because the participant was unable to come to the unit.

Data analysis

A qualitative content analysis (Krippendorff, 2004) was carried out using an inductive approach where the categories are derived from the data. The process includes identifying, coding, and categorizing any patterns in the data (Graneheim & Lundman, 2004). Both the manifest and the latent content of the text were of interest in the analysis. The categories and subcategories are expressions of the manifest content, which refers to what the text says, that is, the visible and obvious components of the text. The themes are expressions of the latent content and refers to what the text is talking about, namely, the underlying meaning of the text (Graneheim & Lundman, 2004). The analysis was conducted by two of the authors (JM & CÖ), who continuously discussed and confirmed the findings. First, the material was read multiple times to achieve an optimal understanding of the content. When needed, audio recordings were listened to. Second, all meaning units, defined as one or more sentences or just parts of one sentence, carrying a meaning connected to the research question, were extracted from the material. Third, the meaning units were shortened to their essence. Fourth, coded text units with similar meaning were grouped into mutually exclusive categories reflecting central messages in the interviews. Fifth, categories were divided into subcategories based on dissimilarities within the categories. Sixth, themes were derived through an interpretation of what the participants were talking about, expressing the essence of their experiences. To increase the rigor of the analysis the interview text was read again and the categories, subcategories and themes were compared and validated against the text. Because participants received treatment at two periods (2016 and 2017), a special review of the analysis was made, which confirmed that data from the different periods contributed to all categories.

RESULTS

Two themes were identified: *A need to belong* and *a need to be an active participant in one's own treatment*, expressing the essence of the participants' experiences. The themes are related to two, respectively, three of the main categories, as shown in Fig. 1. The themes are further elaborated on in the Discussion section. The analysis resulted in four categories with subcategories and are presented below together with quotes that closely mirror the categories and subcategories. The themes, categories and subcategories are summarised in Fig. 1.

To meet others in a group

In this category, the adolescents described their experiences of the group format.

Recognition and togetherness. The value of meeting others with similar problems were underscored. Participants alluded to the realization that it was helpful not being alone in experiencing challenges associated with ADHD.

> It was thus more fun to join a group because then you will, like, know [that] you are not alone, and then you just sit there, like, check out all this! We can be fucked up together! (Participant 5).

Sharing. Benefits of sharing experiences and tips with each other were emphasized. Participants gave examples of sharing experiences of ADHD, comorbidity and medication and highlighted that the group format offered them an opportunity to exchange strategies with each other.

> I know other people with ADHD but it is not that often that you sit down and talk about it. Yes, talk about medicines and side effects, or the effects of ADHD. But we did that here. (Participant 2).

Group therapy versus individual therapy. The benefits of participating in a group, as compared with meeting a therapist one-on-one, were emphasized and the group format was described as more fun, easier, and generally more comfortable. Even though one participant preferred individual therapy sessions over group sessions, to have others to relate to was generally perceived as positive.

> When I was younger and underwent individual therapy rather than group therapy, I had a hard time expressing myself. It felt like, I don't know what to say, but when we were many, others could talk and I could fill in with conversation and that made it easier to converse. (Participant 4).

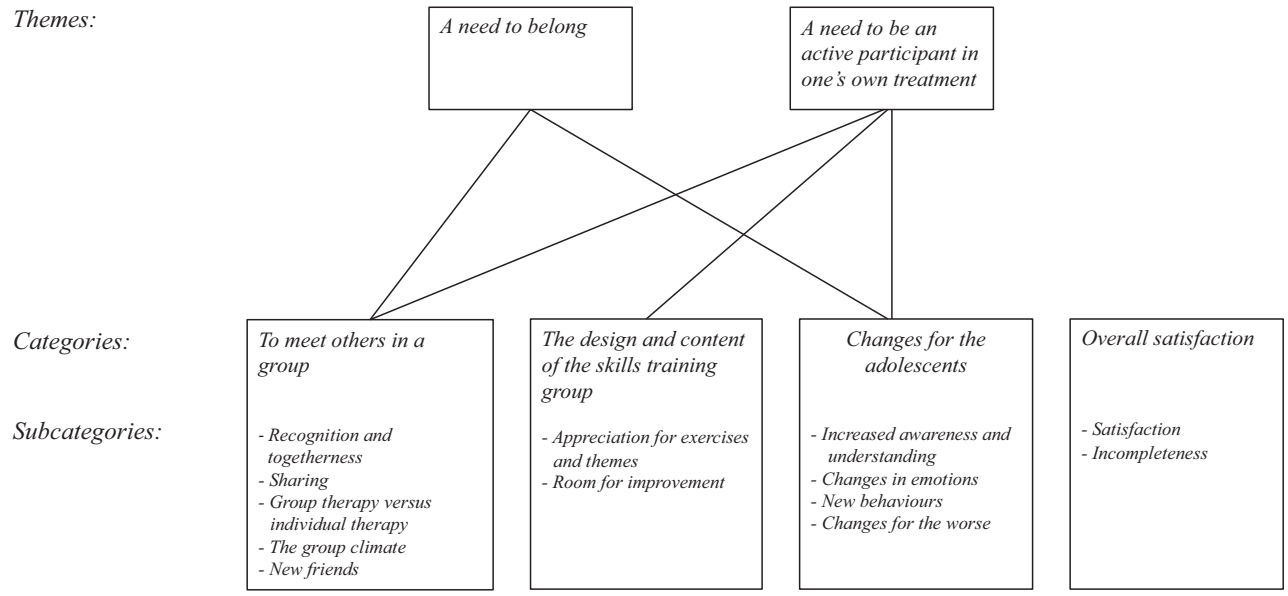

Fig. 1. Themes, categories and subcategories, and how they are interrelated.

The group climate. Participants depicted a relaxed, open, and supportive climate in the groups. They felt the climate in the group was considered enjoyable and fun with a high level of participant engagement. A few mentioned a feeling of nervousness at the beginning of the group sessions but observed that the length of the treatment contributed to a more relaxed atmosphere. However, one participant experienced the group as being too chaotic and chatty.

> We could say just about whatever we wanted during the group sessions. (Participant 17).

New friends. To meet and get to know other adolescents in the group was seen as positive. Some of the participants even made new friends through the group.

The design and content of the skills training group

In this category, the participants expressed their opinions about the design and content of the treatment. They also suggested improvements in the treatment.

Appreciation for exercises and themes. The exercises and themes in the treatment were generally valued, especially exercises in which the participants were actively engaged, that were creative, and that involved multiple sensory input. Participating in discussions during sessions was seen as helpful. A few underlined that the program as a whole had been helpful in contrast to specific parts of the program.

> Well, there were some exercises that were great. It was so that you came to understand so much; it was like when we should have some balloons in the air and also when we watched these short [film] clips. I think that's fun. Maybe it is because you both see and hear it, then one gets very good information. It is short but fast, so you don't get tired of it all. And when I can participate in the conversation, I usually don't get tired. (Participant 7)

> It was like a multi-tool; it was not just one [tool]. (Participant 3).

Room for improvement. The treatment was sometimes experienced as too repetitive, long, monotonous and educational, where some participants described that it was hard to concentrate and that the treatment reminded them of school. Episodes of time pressure during some sessions, with limited time for discussion and too few breaks, were also described. The participants wanted a more active and playful approach in the treatment and suggested more breaks, physical activity, practical exercises, more variation, time for discussions and a reduced number of homework assignments.

A few participants thought that parts of the treatment were too basic. At the same time others stated that they sometimes found it hard to understand some words and exercises, that the program included examples that were difficult to relate to and that the layout of the PowerPoint was boring. Corroborating this, there were suggestions to use less difficult words and change the material by making the PowerPoint more colorful and fun. There were both proposals for increasing and reducing the number of sessions. To add booster sessions was another recommendation. In addition, the participants requested expanding certain topics based on individual preferences and needs. While one wanted more focus on co-morbidity, another wanted more focus on ADHD. A few emphasized that it is important that the group leaders have good knowledge about ADHD.

> The powerpoint we had . . . it was just . . . just text, text, text and one little image. We had needed more that caught our attention." (Participant 15).

> Yes, oh, right, now I remember one thing that was bad with the group. It was just that I noticed that very much in the papers and in the tasks was meant for adults. Sometimes there were very difficult words. (Participant 2).

Changes for the adolescents

In this category, the participants reported personal changes that they associated with the treatment.

Increased awareness and understanding. Participants recounted an increased knowledge and awareness as a result of the treatment. They claimed to be more attentive to their own thoughts and impulses, and could notice when they lost their focus. They also stated an elevated understanding and acceptance of themselves, their functioning, and their diagnosis, as well as a better understanding of other people. The participants described that their thoughts and modes of thinking changed during the course of the treatment. Some participants described an increased awareness of the consequences of their behaviors and some had begun to think more positively about themselves and their own personal worth. Strategies that contributed to an increased awareness and understanding were also revealed, where behavioral analysis was mentioned several times. A few of the participants asserted that their parents showed an increased understanding towards them.

> After these group conversations, I have come to realize I do not judge myself in the same way as everyone else does. I've been so super hard on myself. I recognize now that I have to judge myself the same way I judge others and be kind to others. (Participant 11)

Changes in emotions. Most of the participants expressed some positive emotional changes. The treatment had contributed to less perceived stress and feelings of anger, as well as experiencing improved mental health, increased maturity, and higher self-esteem. Specific techniques, such as mindfulness, were viewed as helpful to reduce stress.

> So, now I feel better about myself. I thus accept myself and I sort of feel better about myself. Indeed, I think the group greatly helped me to improve my self-esteem. (Participant 15)

New behaviors. Most participants reported several behavioral changes as a result of the treatment, including submitting assignments on time, being more helpful at home, having fewer interpersonal conflicts, sharing more about themselves with friends and parents, and improved concentration and focus. Participants gave examples of techniques from the treatment that they now used more frequently. Mindfulness and breathing exercises were conducted to handle stress, to calm down, and regain focus. Behavioral analysis was used to prevent negative behaviors (and encourage positive behaviors), such as to avoid conflict with family members and friends. Other strategies described as helpful included taking one step at a time, taking more breaks during assignments, and use to-do lists.

> What has changed at home is that I do more household chores now, such as washing the dishes and cutting the grass; yes, [I do] all these household chores without starting any arguments. I do all this – at least most of the time – and I'll do it right away instead of argue about it. (Participant 6

Changes for the worse. A few of the adolescents mentioned some negative changes linked to the treatment, such as feelings of increased irritation when the treatment was not perceived as meaningful, impaired well-being when the treatment terminated, increased stress during some mindfulness exercises, and negative feelings due to increased insight about their own difficulties. However, all negative changes during treatment were reported as transitory.

Overall satisfaction

This category captures more general statements about the treatment.

Satisfaction. Most of the participants reported appreciation for the treatment, describing the treatment as good, fun, and helpful.

> So, I felt it [the treatment] was helpful – that it was a good help. (Participant 20)

Incompleteness. Some of the adolescents noted that the treatment was insufficient to attain complete well-being. A few felt that the treatment did not help them enough and some reported that the treatment failed to impact certain areas in their life (e.g., school). A need to continue to work with themselves even after treatment was also described.

> Yes, I know how I function, but I do not know how to make it work in practice. (Participant 8)

DISCUSSION

This is the first study to explore how adolescents with ADHD experience participating in a structured skills training group based on DBT. Most of the participants perceived the group treatment as meaningful and two themes were identified: *A need to belong* and *a need to be an active participant in one's own treatment*. The participants experienced a value of meeting other adolescents with ADHD in a group. Participating in exercises and discussions was appreciated and the practice of specific techniques were described as helpful. The adolescents described an enhanced knowledge and awareness, an increased well-being, as well as positive behavioral changes in their everyday life. Suggestions for how to improve the treatment were also expressed.

The theme *a need to belong* alludes to the experiences of the group format as meaningful and emphasizes the value of sharing experiences, mutual recognition, increased understanding and acceptance, as well as feelings of togetherness. Similar experiences were reported about the group format in a study conducted on adults with ADHD (Morgensterns, 2016). The results in the present study also illustrate that some participants had a negative image of themselves, that is, they felt lonely and different, expressing earlier difficulties in accepting themselves. Corroborating this, in a qualitative study conducted on adolescents with ADHD, negative feelings such as shame, embarrassment and annoyance about having ADHD were described (Sikirica *et al.*, 2015). However, participating in a group treatment together with peers with ADHD seemed to help some of the participants in the present study to alleviate their low self-esteem and poor self-image. A decreased feeling of being alone as well as an increased understanding and acceptance of

themselves and of others were described. The need to belong and to feel togetherness reflects a general human need, which should not be underestimated in the work towards an increased well-being. Indeed, Morsink and colleagues reported that a "sense of togetherness" motivates adolescents with ADHD (Morsink, Sonuga-Barke, Mies, Glorie, Lemiere & Van der Oord, 2017).

Several of the participants also voiced a preference for group treatment over individual treatment, implicating that the group format may be a promising alternative to individual therapy for this age group. This result is in line with the conclusions of Vidal *et al*. (2015), underscoring that CBT-based group therapy is an acceptable approach for adolescents with ADHD. The benefits of practicing new behaviors together with others can also be understood from Bandura's *social cognitive theory*, underscoring that a person's behavior is influenced by observing other peoples' actions (Bandura, 1986). The influence of social learning may be of particular importance in groups with young people, since adolescence is a time when peers' behavior and reasoning have a strong impact on the individual (Berk, 2006).

The second theme, *a need to be an active participant in one's own treatment,* summarize the expressed value of being active during the treatment. Exercises and discussions helped the adolescents to be engaged and focused during the sessions. Practicing specific techniques and skills, such as behavioral analysis and mindfulness, was also described as helpful, especially for changing behavioral patterns. Both some of the expressed criticism and the suggested changes relate to the importance of being an active participant rather than a passive bystander in the treatment. For instance, some participants perceived parts of the treatment as too monotonous, repetitive and similar to school work, and thus further adaptations of the manual were requested. Comparable experiences were reported in a study conducted on adults with ADHD (Morgensterns *et al*., 2016), where some individuals perceived parts of the treatment as school like, for example, psychoeducation and homework. In parallel to the findings in the present study, Morsink and colleagues (2017) underscored the importance of variations in activities for adolescents with ADHD, since activities that are too slow, long-lasting and repetitive may be aversive for this group. The participants in the present study made suggestion for improving the treatment, including more practical exercises, discussions and breaks, less home work as well as more variations in the exercises. Considering the core symptoms of ADHD with deficits in sustained attention and restlessness, these suggestions are understandable and important to consider. The treatment's language and some of the exercises were considered too difficult for some of the participants. The importance of making the content more understandable and all the examples applicable to the age group has been emphasized in previous research (MacPherson, Cheavens & Fristad, 2013), and further adaptation of the manual could be undertaken to ensure that as many patients as possible can take advantage of the treatment.

Several of the participants described improvements related to core symptoms within ADHD, including concentration, impulse control, fewer interpersonal conflicts, and reduced procrastination. Although no strict conclusions can be drawn from this study about the effects of the treatment, several of the participants' descriptions indicated positive outcomes that agree with previous studies conducted on adults (Hirvikoski *et al*., 2011; Morgensterns *et al*., 2016; Philipsen *et al*., 2007). A few participants conveyed negative experiences associated with the treatment. These statements about negative feelings due to an increased insight about own difficulties and an impaired well-being when ending the treatment are in line with findings by Morgensterns *et al*. (2016). Although the discomfort during treatment was described as transient, it is important that clinicians pay attention to any impairments of the participants' mental health, both during and after treatment. There were a few statements indicating that group treatment in general and the skills training group in particular, may not be suitable for all adolescents with ADHD. Further studies are needed to assess which patients who can benefit the most from the treatment and for whom alternative treatment options should be investigated.

It is relevant to consider possible adjustments that may increase the prerequisites for the treatment to be acceptable and appreciated by this group. A prolonged treatment, as suggested by participants in the present study, could be one opportunity to create space for more exercises and allowing time to consolidate knowledge. The use of booster sessions was another suggestion that could serve the same purpose. When evaluating the adult version of the structured skills training group, Philipsen, Graf, Tebartz van Elst, Jans, Warnke and Hesslinger (2010) added a maintenance period in which skills were repeated and exercised and the participants were invited to join three single sessions in addition to the group sessions. Involving family members in the treatment is another modification that may extend any treatment effects to other domains, such as the home (Miller, Rathus & Linehan, 2007). However, consideration must be given to the fact that adolescence is associated with increased autonomy (Berk, 2006) and therefore, any involvement of parents in the treatment may not be appreciated or well accepted.

This study has some limitations. First, it should be underlined that this is an exploratory study, and therefore, no conclusions about the effects of neither the treatment nor the group format can be made. Rather, the aim of the study was to explore how adolescents with ADHD experienced the group format and the structured skills training, for which interviews and qualitative content analysis are seen as appropriate methods (Krippendorff, 2004). Second, one of the researchers who performed the analysis also served as a group leader in two of the four treatment groups. Previous knowledge of the participants could potentially influence the interpretation of the text. However, pseudonymization of the transcribed text decreased the risk of linking the text to a specific person. The use of two persons in the analysis, that is, analyst triangulation, is also a strength that help the researchers to stay close to the text and increases credibility (Graneheim & Lundman, 2004; Patton, 2015). Third, only participants that completed the treatment were asked to participate, this could have biased the results. Although the aim of the present study was to explore how adolescents with ADHD experienced participating in the treatment, investigating reasons for dropout may be an area worthy of future research. Fourth, the number of participants (n = 20) is rather large for a qualitative study, nevertheless, a larger sample of informants could have led to additional information. Even though data saturation was not used in the recruitment procedure of participants, we noticed that the last

interviews confirmed previous results and did not result in any new categories. Fifth, the majority of the participants were girls (60%), which does not represent the gender distribution of ADHD, that is, ADHD is more common among boys (APA, 2013). This missmatch in gender distribution must be taken into account when interpreting the results. For instance, the results may not be transferable to all adolescents with ADHD and it is possible that the analysis would have yield other results with a more representative gender distribution. However, the gender distribution in our study is not surprising since it reflects a gender bias previously reported in two Swedish treatment studies conducted on adults with ADHD (Hirvikoski *et al*., 2011; Morgensterns *et al*., 2016) and possibly, in some cultures, females are more prone compared to males to seek help and participate in psychological treatments.

This study also has some strengths. First, to enable transferability, we sought to maintain transparency by extending a clear description of the context, participants, data collection, and analysis according to recommendations (Graneheim & Lundman, 2004). Second, because the participants had no prior relationship to the interviewers, this should encourage the participants to speak more objectively and freely about the pros and cons of the group treatment. Third, the interviewers closely followed the interview guide and hence all participants received the same main questions. Such consistency helps to ensure that everyone had the opportunity to share their experiences under similar conditions. Fourth, to stay true to all data, we actively searched for results that did not match the opinions of the majority and incorporated these opinions in the data analysis.

CONCLUSIONS

The group format enabled a meaningful exchange between the participants and may provide added value for this group of patients. The use of an active approach, with a variety of exercises and time for practice and discussions, seems to be of importance when working with adolescents with ADHD and should be considered when developing treatments for this group of patients. Even though no conclusions can be made about the treatment effects per se, the experiences expressed in this qualitative study indicate that the structured skills training group was appreciated and helpful for many of the participants. As a next step, the efficacy of this treatment should be evaluated in randomized controlled trials.

CONFLICTS OF INTERESTS

The authors declare that they have no competing interests.

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Data Availability Statement

The data that support the findings of this study are available on reasonable request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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