A qualitative study exploring adolescents' experience of brief behavioural activation for depression and its impact on the symptom of anhedonia

the british psychological society
promoting excellence in psychology

Psychology and Psychotherapy: Theory, Research and Practice (2020)

www.wileyonlinelibrary.com

A qualitative study exploring adolescents' experience of brief behavioural activation for depression and its impact on the symptom of anhedonia

Rebecca Watson*[1], Kate Harvey[1], Laura Pass[1,2], Ciara McCabe[1] and Shirley Reynolds[1]

[1]University of Reading, UK
[2]University of East Anglia, Norwich, UK

Objectives. Anhedonia, the loss of interest and pleasure, is a core symptom of depression and is associated with deficits in reward processing. Behavioural Activation for depression may address this symptom due to its focus on identifying and increasing intrinsically rewarding activities.

Design. This was a qualitative study employing reflexive thematic analysis (TA).

Methods. Participants were eight treatment-seeking adolescents with a recent primary diagnosis of depression who had received eight sessions of Brief Behavioural Activation. Qualitative semi-structured interviews were conducted after treatment was completed.

Results. Three main themes emerged: (1) connecting, reviewing, and taking action: 'focus on getting better rather than what you're feeling'; (2) struggles, restrictors, and motivators: 'it seemed really unachievable'; and (3) feeling, acting, or seeing things differently: 'looking forwards in a more healthy way'.

Conclusions. Both specific Brief Behavioural Activation strategies (e.g., connecting with values) and more generic therapeutic strategies (e.g., self-monitoring) may be helpful in treating the symptom of anhedonia in adolescent depression. Motivational aspects of anhedonia, as well as anxiety, fatigue, and academic pressures act as potential barriers to recovery. This highlights the need for psychological treatments for adolescent depression to include explicit and targeted strategies to enhance motivation.

Practitioner points

- Young people reported that specific Brief Behavioural Activation strategies (e.g., connecting with values) and more generic therapeutic techniques (e.g., self-monitoring) had a role in treating anhedonia.
- Barriers to engaging in Brief BA included: motivational anhedonia, fatigue, and academic demands.

**Correspondence should be addressed to Rebecca Watson, School of Psychology and Clinical Language Science, University of Reading, Reading RG6 7BE, UK (email: r.watson2@pgr.reading.ac.uk).*

DOI:10.1111/papt.12307

Adolescence is a period of high risk for the development of depression; for example, Major Depressive Disorder (MDD) has a point prevalence estimate of 2.6% (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015). Adolescent depression is associated with a number of negative outcomes, including failure to complete secondary/high school and unemployment (Clayborne, Varin, & Colman, 2019). Anhedonia, the loss of interest and pleasure, is a core symptom of MDD (APA, 2013) and is reported by at least 50% of adolescents with MDD (Goodyer *et al*., 2017; Orchard, Pass, Marshall, & Reynolds, 2016). Anhedonia may have a key role in maintaining depression; it predicts non-response to treatment in adults (Vrieze *et al*., 2014) and poor treatment outcome in adolescents (McMakin *et al*., 2012). In a meta-analysis of longitudinal studies, Khazanov and Ruscio (2016) found that positive emotionality (positive affect, extraversion, and behavioural activation) was a temperamental vulnerability factor for both depression and anxiety. Furthermore, a secondary analysis of randomized controlled trial of depressed individuals showed that higher baseline distress and anhedonia predicted longer time to remission within one year, and recovery within three years, albeit less than distress (Khazanov *et al*., 2020).

Anhedonia has been shown to be related to dysfunctional behavioural and neural reward processing in adults (Halahakoon et al.,2020; Rizvi, Pizzagalli, Sproule, & Kennedy, 2016). Reward processing consists of multiple steps such as the appetitive/motivational, that is, *wanting* step which is followed by the consummatory/hedonic, that is, *liking* step. There is also a reward learning step whereby predictions can be made about positive outcomes (Treadway & Zald, 2011). Further, a recent study found that in adolescents with depression symptoms anhedonia correlated with decreased physical motivation (effort) to gain reward (Rzepa & McCabe, 2019). However, it is less clear which aspects of the reward process are the most impaired or problematic in adolescents with depression (McCabe, 2018). Anhedonia is also conceptualized as low positive affect. Thus, adolescents' subjective reports of anhedonia highlighted difficulties with lack of enjoyment, boredom, emotional blunting, low motivation, disconnection, and loss of purpose (Watson, Harvey, McCabe, & Reynolds, 2019). These experiences are distinct from high negative affect, which is typically experienced as sadness and low mood (Clark & Watson, 1991; Watson, Clark, & Tellegen, 1988).

There are a number of evidence-based psychological treatments for adolescents with MDD, including Cognitive Behavioural Therapy, Interpersonal Therapy, Psychodynamic Therapy, and Family Therapy (NICE, 2019). However, in a meta-analysis of psychological treatments for child and adolescent mental health difficulties, Weisz *et al*. (2017) found that effect sizes following treatment of depression were small, and were consistently smaller than those obtained following psychological treatments for other common youth mental health problems.

Existing evidence-based treatments for depression in adolescents typically target high negative affect (i.e., sadness, low mood) and neglect difficulties with low positive affect (i.e., anhedonia). For example, a recent secondary analysis of two randomized controlled trials (RCTs) with depressed adults showed that two treatments, Cognitive Behavioural Therapy (CBT) and anti-depressant medication (ADM), were better at repairing negative affect than positive affect (Dunn *et al*., 2019). Some clinical researchers have therefore hypothesized that the effectiveness of treatments for depression may be increased by targeting low positive affect/or anhedonia (e.g., Craske *et al*., 2019; Dunn *et al*., 2019). Behavioural Activation treatment (Lejuez, Hopko, Acierno, Daughters, & Pagoto, 2011; Lejuez, Hopko, & Hopko, 2001; Martell, Addis, & Jacobson, 2001; Martell, Dimidjian, & Herman-Dunn, 2010) aims to increase positive reinforcement. Forbes (2020) suggested that by increasing participants' contact with rewarding stimuli and thus targeting (low)

reward functioning, BA may bring about improvements in depression symptoms. Furthermore, a meta-analysis of RCTs found a significant effect of BA on subjective well-being (which incorporates positive affect), although studies were of mixed quality (Mazzucchelli *et al*., 2010).

Behavioural Activation for depression is an effective treatment for adults with depression (NICE, 2018). There is accumulating evidence that Behavioural Activation is safe and acceptable to adolescents (e.g., Pass, Lejuez, & Reynolds, 2018), and one small randomized controlled trial (McCauley *et al*., 2016) suggests that it is as effective as other evidence-based treatments for adolescent depression. Brief Behavioural Activation (Brief BA; Pass, Brisco, & Reynolds, 2015) is an 8-session treatment for adolescents that aims to increase positive reinforcement for healthy behaviours by identifying intrinsically rewarding activities based on an individual's personal values. It also uses other non-specific psychological therapy techniques including collaboration between therapist and client, structured sessions, identifying goals, and self-monitoring.

Previous work has explored the experience of anhedonia in adolescents (e.g., Watson *et al*., 2019), but no research has explored experiences of anhedonia following a reward focused treatment such as BA. Therefore, the aim of this study is to explore the experiences of adolescents who had received Brief Behavioural Activation for depression, and specifically to focus on changes in anhedonia. Participants were young people who had been referred to a mental health service, were diagnosed with a primary diagnosis of MDD or Persistent Depressive Disorder, and received Brief BA (see Pass *et al*., 2015 for detailed treatment protocol). After treatment ended, participants took part in one-to-one qualitative interviews. Thematic analysis was conducted to explore adolescents' experiences in depth.

Methods

This study received ethical approval from the NHS Research Ethics Committee and University Research Ethics Committee. The COREQ checklist for reporting qualitative data was followed (Tong, Sainsbury, & Craig, 2007), as well as guidelines for ensuring rigour and reflexivity in qualitative research (Harper & Thompson, 2011).

Recruitment

Participants were recruited via a publically funded Child and Adolescent Mental Health Service in the South of England (UK). Eligibility criteria for the low/medium-intensity service meant that young people with active suicide plans or co-morbid psychosis were not recruited.

Adolescents were assigned depression diagnoses on the basis of the Kiddie Schedule of Affective Disorders and Schizophrenia (K-SADS; Kaufman *et al*., 1997) and were diagnosed with co-morbid anxiety disorders on the basis of the Anxiety Disorder Interview Schedule for DSM-IV for children, child and parent versions (Anxiety Disorders Interview Schedule – child and parent report; ADIS-C/P; Brown et al., 1994; Silverman, 1996). Both schedules are semi-structured diagnostic interviews based on DSM-IV. Minor amendments were made to the interview schedules to enable diagnoses consistent with DSM-5 diagnostic criteria. As is conventional with both assessments, the interviews were conducted with young people and their caregivers separately (See Data S1).

Individuals were recruited from a pool of twelve young people (aged 11–17) who met DSM-5 criteria for a primary diagnosis of either MDD or Persistent Depressive Disorder and took part in a previous qualitative study (see Watson *et al*., 2019). Nine young people completed eight sessions of Brief BA and a review session over approximately 10 weeks. This form of BA is based on Behavioral Activation for the Treatment of Depression (BATD; Lejuez *et al*., 2001, 2011), which explicitly focuses on the client's values, a feature which is less pronounced in treatment protocols developed by Martell *et al*. (2001, 2010). The remaining three young people did not complete Brief BA: one was referred to a specialist CAMHS service; one completed a combination of Brief BA and other therapy techniques due to their complex presentation; and one decided not to take part in treatment. Brief BA sessions were delivered by Child and Adolescent Psychological Wellbeing Practitioners, who are clinical staff who have received one-year post-graduate training in brief psychological interventions for children and adolescents. The remaining participants were invited to take part in a second interview, described in the current study.

Participants

Of the nine eligible young people, eight (age, M = 15.8 years, SD = 1.7; gender, 25% male) took part in the current study; and one (male, aged 15) chose not to participate. Participants completed the current study up to 2 months after finishing the eighth treatment session (range 0–2 months).

Table 1 shows clinical data for each participant including previous treatment history (elicited via interview). Seven participants met criteria for primary diagnosis of Major Depressive Disorder (six of whom met threshold for the symptom of anhedonia), and one for Persistent Depressive Disorder. All participants were White British. Most participants also met criteria for co-morbid anxiety disorders. Before treatment began six participants reported symptoms of depression in the clinical range on the Mood and Feelings Questionnaire (Angold, Costello, & Pickles, 1987). Of these, four participants reliably improved on self-report measures of depression (MFQ), pleasure (SHAPS) (Snaith *et al*., 1995), and overall functioning (ORS) (Bringhurst, Watson, Miller, & Duncan, 2006). One participant had a high depression score before and after treatment, and another deteriorated on all measures. Two participants who had scores below the clinical range at baseline did not show reliable improvement on some measures.

Procedure

Informed written consent/assent was obtained from all participants and from the parents of young people under 16 years of age.

A topic guide was adapted from Watson *et al*. (2019). This was informed by the research question and the authors' clinical and research expertise in the fields of depression, anhedonia and qualitative methodology. Potential questions and prompts were discussed with a Public and Patient Involvement (PPI) member with personal experience of mental health difficulties, and the topic guide was revised in response to these discussions. The final topic guide included open questions relating to changes in anhedonia (i.e., pleasure/enjoyment, anticipation/excitement, and motivation/effort), followed by prompts to gather richer data about each experience (see Data S1).

The first author, a female PhD student, conducted the interviews face to face in a quiet room in the clinic with only the researcher and participant present. Interviews were audio recorded and lasted an average of 26 min (range 13–45 min). Interviews were transcribed

verbatim by RW, all identifying information were removed, and pseudonyms assigned. Field notes were made after the interview, and NVivo software (2018) used to aid in analysis. Participants received a £10 gift voucher for their participation.

Data analysis

In this study, the researchers adopted a broadly critical realist (post-positivist) perspective (Guba & Lincoln, 1994) which makes the assumption that although aspects of an individuals' experiences are measurable and observable, there is not one objective reality, and participants and researchers are not fully aware of all the factors that influence their experiences and interpretations (Harper & Thompson, 2011). The data were analysed using thematic analysis, which is a method used for identifying, analysing and reporting patterns within a data set (Braun & Clark, 2006). A reflexive form of thematic analysis was used that conceptualizes themes as patterns of shared meaning that is generated through interpretation of the data (Braun & Clark, 2019a, 2019b). Developers of reflexive thematic analysis (Braun & Clark, 2006, 2019a, 2019b) advocate that concepts of data or theoretical saturation are not consistent with reflexive qualitative approaches. The researchers considered their own prior assumptions and sources of bias. The first author (RW) completed the study as part of a PhD exploring anhedonia in adolescent depression and has experience conducting and supervising diagnostic depression assessments. LP and SR are clinical psychologists who have adapted Brief BA for adolescents; LP has also delivered and supervised diagnostic depression assessments and Brief BA in clinical and community settings. KH has extensive expertise in qualitative methodologies, and CM examines the relationship between reward function and anhedonia using neurocognitive measures. RW, KH, and CM have no affiliation with the treatment approach.

Using Braun and Clark's (2006) six-stage approach to thematic analysis, in the first stage of the analysis RW became familiar with the data by conducting and transcribing the interviews, and then reading and re-reading the transcripts. In stage two, RW conducted line-by-line coding. This process was inductive and recursive, with constant comparisons made between and within transcripts. In the third stage, codes were combined into potential themes, which reflected major features and patterns in the data. In the next stage, as recommended by Saldaña (2015) themes were reviewed by the research team (KH, CM, LP, and SR) during six coding meetings. Coding meetings increase the rigour of the analysis by enabling alternative interpretations to be considered and discussed until a consensus on the interpretation of patterns in the data was reached. Later meetings refined the specifics of each themes and the overall story the analysis tells, generating clear definitions and names for each theme (Braun & Clark, 2006). In the last stage, agreed themes were finalized and considered within the broader context of Brief BA and more specifically with regard to the symptom of anhedonia and altered reward processing. Quotations illustrative of each theme identified, and Figure 2 was developed to conceptualize how participants' treatment experiences mapped onto components of the reward system.

Results

Three key themes were identified, each with a number of sub-themes. These are displayed in Figure 1. The link between each sub-theme and the reward cycle is displayed in Figure 2. As highlighted in the introduction, anhedonia is known to have a number of

reward-related components. Reward processing can be described as a feedback loop that starts with the initial building of a stimulus–reward association (activation/maintenance of emotion or reward representation) that leads to anticipatory pleasure (i.e., predicting an event will be pleasurable and feeling anticipatory pleasure) and then activates approach motivation (i.e., wanting to do something) and approach behaviour (i.e., encouraging an individual to seek out a particular stimulus from which experience pleasure), and finally, this feedback is integrated, updating reward presence and values (Kring & Barch, 2014; Rizvi *et al.*, 2016).

See Table 1 for quantitative outcome measures. For simplicity, in the text, participants have been categorized as either a full responder (improvement on outcome measures of depression, anhedonia and functioning, and no longer in the clinical range); mixed responder (improvement on at least one outcome measure, but possibly still in clinical range for some outcome measures); or a non-responder (no change or deterioration on all outcome measures).

Theme 1 – Connecting, reviewing, and taking action: 'Focus on getting better rather than what you're feeling'

Young people identified a range of specific Brief BA strategies that helped them to improve their mood and increase levels of enjoyment and motivation.

Connecting with what is important: 'I just didn't realise I valued it'

This sub-theme links with a core aspect of Brief BA in which the therapist and young person identify the young person's values and then identify and plan activities that are consistent with these values. Some participants reported that this focus helped them to reconnect with what they used to enjoy before they became depressed, and to feel more motivated to engage in valued activities. For Jasmine (full treatment responder), this helped her to identify what made her feel happy and what didn't, 'found out stuff that makes me low. . . and stuff that I need to do to make me feel better and happier'.

A number of participants emphasized that it was not necessarily important to do more, or to do different activities, but that it was important to re-evaluate what they were already doing and to consider its value or purpose (a key principle in Brief BA). Adam recognizing an activities value helped him feel more motivated to engage in the activity,

> . . .it helped me think about what was important, but not necessarily trying to find stuff to do, made me feel like the stuff that I was doing I realised what was good and what wasn't. . .made me more motivated to do it (Adam, mixed treatment responder).

Beyond just considering what was important to them in the 'here and now', reconnecting with their own values helped some participants feel more motivated to take part in personally valued activities in the future, to consider their passions, and inspired them to become the person they wanted to be.

> . . .before things started getting really bad I did enjoy like a lot more things, it was quite nice to go, actually no I do love doing this, I do have a passion for this, I think I do like doing things in my spare time then it kind of made me realise I want to keep on doing them [activities] 'cos that's the kind of person I want to be, like I want to be that person that gets up and goes for

Table 1. Participants' demographic and clinical characteristics

				MFQ (/66)[b]			SHAPS[c]			Outcome rating scale			
Pseudonyms	Age[a]	Gender	Diagnoses	Pre	Post	Reliable change	Pre	Post	Change (clinical/non-clinical)	Pre	Post	Reliable change	Treatment history
Adam	17	Male	Major depressive disorder[d] Persistent depressive disorder Generalized anxiety disorder	18	–	Below clinical threshold pre-treatment/ N/a	2	1	Improvement	32	38	Above clinical threshold pre-treatment/ no change	None
Alice	13	Female	Major depressive disorder Social anxiety disorder Generalized anxiety disorder	37	38	No change	7	7	No change	19	35	Improvement	Counselling
Claire	17	Female	Major depressive disorder[d] Persistent depressive disorder Social anxiety disorder	56	32	Still in clinical range/ improvement	10	2	Still in clinical range/ improvement	4	26	Improvement	Counselling
Gary	17	Male	Major depressive disorder[d]	46	7	Improvement	9	0	Improvement	15	37	Improvement	None
Ivy	13	Female	Major depressive disorder[d] Persistent depressive disorder Social anxiety disorder Generalized anxiety disorder Obsessive compulsive disorder	39	47	Decline	7	10	Decline	15	2	Decline	None
India	17	Female	Major depressive disorder[d]	46	11	Improvement	8	0	Improvement	30	38	Above clinical threshold pre-treatment/ improvement	Counselling
Jasmine	15	Female	Major depressive disorder[d] Persistent depressive disorder Social anxiety disorder	26	12	Below clinical threshold pre-treatment/ improvement	11	1	Improvement	13	20	Improvement	Counselling
Jennifer	17	Female	Persistent depressive disorder Social anxiety disorder Generalized anxiety disorder	42	25	Improvement	6	0	Improvement	26	22 [session 5]	N/A	Counselling

Note. (–) missing data.

[a]Age at interview.; [b]MFQ = Mood and Feelings Questionnaire (higher scores indicate more depression) (Angold *et al*., 1987). A score of 27 or above indicates clinical levels of depression (Wood *et al*., 1995).; [c]SHAPS = Snaith Hamilton Pleasure Scale (higher scores indicate more anhedonia), a score of 2 or more when using a dichotomised scoring system indicates clinical levels of anhedonia (Snaith *et al*., 1995). ORS = Outcome Rating Scale (Bringhurst *et al*., 2006). Clinical Threshold ≤28 (equal to or below this score is problematic levels of functioning). Reliable Change Index >6 (Change score 6.55 or more indicates reliable improvement or decline) (CORQ, 2016).; [d]Met criteria for anhedonia symptom on K-SADS.

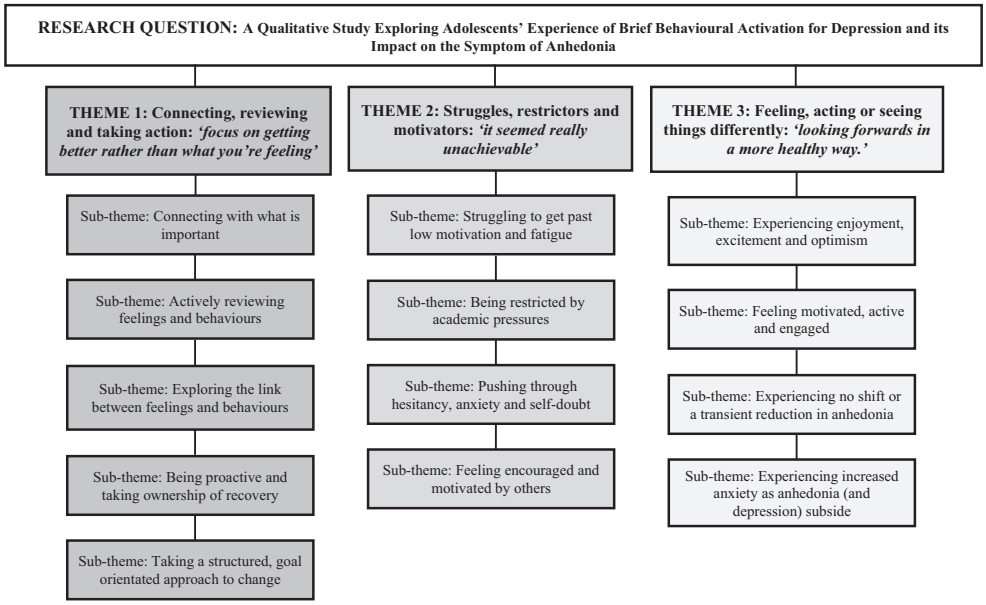


Figure 1. Displays the qualitative study research question and findings (theme and sub-themes).

> runs, I want to that person that's asked for notes in class, like they're good, they wanna do good in school and stuff (India, full treatment responder)

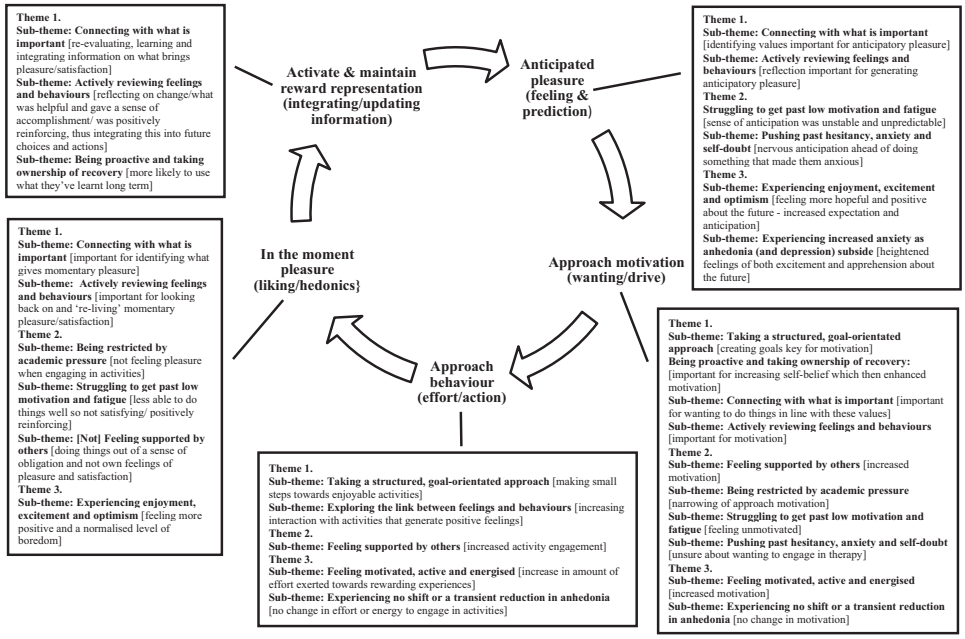
Not all participants found it helpful to focus on their values because they found it difficult to identify what their values were. For example, Alice struggled to identify her personal values. This difficulty was sometimes linked with difficulties discriminating between personal values and those held by family members or friends,

> I just couldn't really think of anything [I value]. . . (Alice, mixed treatment responder).

Actively reviewing feelings and behaviours: 'Why's it going well?'

Participants described the benefit of being encouraged to actively think about their feelings and experiences and to review what made them feel more positive, gave them satisfaction or motivated them forwards. As a consequence, sometimes participants were able to derive more enjoyment and meaning from their experiences, 'it gave me a chance to look at what I've done and be happy with myself' By reflecting on what he had achieved, Gary (full treatment responder) was able to savour the experience of pleasure and satisfaction he felt from completing a task, 'once I've done something I don't see what I have to do next, I see what I've done now, what I've managed to complete, and reflect on that, and sort of be happy with myself'.

Discussing their values and experiences in a more deliberate way with a therapist allowed some participants to really consider what was important to them personally (rather than values deemed important by their peers, family, or wider social group), who they were, and how to achieve what they wanted. Self-reflection was most evidence



Note. Reward processing cycle adapted from Kring & Barch (2014).

Figure 2. Mapping the impact of adolescents' experiences on to parts of the reward system

within some of the older participants. For India (full treatment responder), this led her to dig deeper and really consider what brought her a sense of joy,

> Reflecting on what I actually did beforehand, like before things started getting really bad I did enjoy like a lot more things. . .'cos in everyday conversation when people ask you, oh what do you like to do? I usually go, yeah I like running, I like psychology, I like this and that whatever, when someone actually goes, think what your passion is, what do you wanna get out of life, it kind of forces you to go, yeah reflect on things, to go to things deeper and actually do it actively (India, full treatment responder).

By looking back and reflecting on her progress through the course of BA, India was motivated to realize her ambition of helping others struggling in a similar way, 'I do see those people [who are struggling] and see where I've been and I'm like, well it can get better, I want to make sure they know that'.

In a similar vein, discussing with a therapist their values and experiences also gave some participants a sense of 'perspective' (Jennifer), and an ability to look forward in a more solution focused way. It gave them the chance to identify and build on positive, helpful experiences, and not just to focus on processing their depressive feelings.

> . . .being able to look back at what you're doing and even if something's going well for you to look back and go, "why's it going well?," to just have that time to actually think and review everything that's going on (Jennifer, full treatment responder).

Exploring the link between feelings and behaviours: 'If I'm not feeling so great I'll do it anyway'

A number of participants described a change in their understanding of the connection between their feelings and behaviours. They found that taking action, despite having low motivation, was generally helpful as it meant they were more likely to engage in activities that gave them pleasure. Participants described the benefit of being encouraged by the therapist to engage in activities (despite experiencing motivational anhedonia), and found that they did enjoy activities when they were involved in them. This therefore gave them a direct experience of positive reinforcement. Gary (full treatment responder) explained how, through the process of therapy, he shifted from associating his hobbies with negative emotions to positive emotions. By pushing past his negative feelings, this helped him feel an even greater sense of satisfaction and accomplishment,

> if I'm not feeling so great I'll do it anyway, rather than just putting it off and saying I'll do it when I'm feeling less rubbish about myself, and then as a result it just makes me feel better that I can do it even if I'm not in the best of moods. . . even when I'm in a low mood, I think well, I can do this because it will make me feel happier (Gary, full treatment responder).

The link between behaviour and emotions was not always new to participants. For example, Jasmine explained how she was already aware before treatment that if she did the things she enjoyed when unmotivated she would feel better, but it was through therapy that she was able to act on this strategy, which helped her to feel happier and more positive.

> Just knowing if that if I do it, I'll probably feel better and be worth doing. . . It was something I was already aware of but I just needed to do it. I'd probably feel better, which I always did (Jasmine, full treatment responder).

Being proactive and taking ownership of recovery: 'I need to learn to do things for myself'

Adolescents liked how Brief Behavioural Activation was proactive and felt that this helped them to feel they were actively involved in their own recovery. For some individuals having something they could do for themselves increased motivation and self-belief, as they '. . .. . .started realising I could actually do it' (Adam, mixed treatment responder). Claire described how the Brief BA gave her a sense of agency, '. . . the treatment was actually me doing things myself, so it's something I can control' (Claire, mixed treatment responder).

Being organized and managing time effectively were also useful skills that enabled participants to put the time aside to socialize and do the things they had enjoyed before becoming depressed, even in the context of significant academic responsibilities. Gary also identified that he felt equipped with skills to manage his mood long term,

> [the therapy] it's sort of helped me sort of manage myself after treatment as well as it's given me all the things that I can do if I'm not in a great mood, and stuff like that, so as a result I can be proactive about it, rather than relying on other people and just helping yourself out really (Gary, full treatment responder).

Taking a structured, goal-orientated approach: 'Breaking it up into smaller bits helped'

Participants described creating manageable and achievable goals as part of therapy which helped them to make small steps towards engaging in activities they had previously enjoyed. These steps were necessary to help adolescents feel able to make these practical steps towards the things they enjoyed.

> I would just try and get myself to do something, like five minutes just doing the drawing or something (Jasmine, full treatment responder).

Furthermore, developing both short- and long-term goals was important for increasing motivation and action. Gary said that setting himself goals each day helped motivate him to get out of bed, and when he managed to achieve this goal it increased his positive mood and ultimately initiated a cycle of positive reinforcement,

> I think 'cos now every sort of morning when I get out of bed, I set myself something that I actually need to do or want to do, and as a result I get out of bed to do it and then when it's done I feel sort of feel a certain level of happiness and sort of contentment and as a result I sort of, yeah, it becomes easier to get out of bed (Gary, full treatment responder).

Another participant compared the more practical Brief BA approach to her previous experiences with counselling. In Brief BA, she described her therapist's standpoint as,

> okay let's focus on getting better rather than just what you're feeling. We know what you're feeling, you're feeling sad, let's try and get away from that (India, full treatment responder).

Theme 2 – Struggles, restrictors, and motivators: 'it seemed really unachievable'

Although participants could mostly remember and explain the principles of Brief Behavioural Activation, they were not always able to use the therapy as intended. This theme describes difficulties that they experienced when trying to engage with the key principles of Brief Behavioural Activation, or factors which enabled them to engage effectively.

Struggling to get past low motivation and fatigue: 'I couldn't be bothered'

Symptoms of depression, specifically low motivation (a part of anhedonia) and fatigue, often interfered with young people being able to use the principles of Brief BA. When feeling unmotivated, some participants could not draw on anything they had learned in therapy and simply 'couldn't be bothered' (Jasmine, full treatment responder). Claire (mixed treatment responder) described how her motivation was changeable, meaning that it was hard to predict whether or not she would be able to engage in activities,

> . . . so sometimes I'll look forward to things and want to do them, and sometimes I want to do them but won't look forward to them. I dunno, but um, yeah just kind of have the motivation as well, that comes and goes. It's like I'll go through a period of like, probably three days, where I'll be really motivated to do things, then I'll be off for two weeks like no. . . It's just like I have a battery, the battery lasts for three days and then takes two weeks to charge up again (Claire, mixed treatment responder).

Similarly, feeling exhausted and fatigued got in the way of adolescents being able to engage in the treatment. These symptoms often coincided with motivational difficulties. For some, the effortful nature of therapy was itself a challenge. Ivy (treatment non-responder) described how she would sometimes try to engage in activities despite feeling tired and unmotivated, but they were not positively reinforcing as she did not feel able to do them well '. . . sometimes I felt kind of too tired to do some of the activities, like homework type things, which made me kind of, stopped me from doing things. . . I would try do them but I didn't think I did them as well as I could have done'. Other symptoms sometimes got in the way of engagement, such as concentration.

Being restricted by academic pressures: 'Forget everything else, exams are your life'

Participants who were enrolled in public examinations frequently stated that academic pressures were overwhelming and stopped them from engaging in things that they wanted to do. This was both practically, in terms of not having time, and also emotionally, not feeling motivated or wanting to engage in other activities. '. . .especially with school being so intense like, sometimes I just didn't really have time to do things' (India, full treatment responder). This pressure stopped adolescents from enjoying things in the moment when they took part in activities, and also stopped them wanting to do things in the first place.

Preparing and revising for examinations took up most of their 'free' time and therefore got in the way of socializing and other enjoyable activities. This was especially the case for participants who took part in the study in the midst of preparing for examinations. When talking about not seeing friends, Claire (mixed treatment responder) said,

> 'I think mainly exams, just thinking I do need to be focusing my time on them 'cos that's the mentality I have at the moment, forget everything else, exams are your life for the next month. . . [if it was not for exams I would have] met up with a friend or something, gone for lunch, gone out, done somethings, it doesn't matter what it was' (Claire, mixed treatment responder)'.

Pushing past hesitancy, anxiety, and self-doubt: 'Do I wanna get into this right now?'

A number of participants struggled with symptoms of anxiety and depression, and these sometimes got in the way of them actively engaging in positively reinforcing activities, as they wanted to avoid situations that would make them feel anxious, or felt uncomfortable when in those situations or nervous in anticipation of them.

> 'I was pretty nervous for going [to town] and when I was there I was nervous around everyone that was there, 'cos I'm not great with, I hate being in big crowds of people' (Jasmine, full treatment responder)'.

Symptoms of anxiety, including worry, could also directly interfere with treatment, especially in early sessions. For example, one participant described being hesitant to open up about her difficulties, therefore possibly not wanting to engage, and was doubtful about what she wanted to get out of the therapy.

> 'It's really weird there's some things that you just don't really wanna say, and they're completely fine to say, and it's nothing like a, I'm going to get into trouble to say them but "do I

> actually wanna say this? Do I wanna get into this right now?" I think like that kind of self-doubt as to what I actually wanted to get out of it at the beginning was um definitely in the way (Jennifer, full treatment responder)'.

Feeling encouraged and motivated by others: 'You can't give up now!'

Most participants reported the benefits of receiving practical and emotional support from family and/or friends, which helped to increase motivation to engage in rewarding activities. This took the form of both emotional support, and practical help to do activities.

> . . .like my friends definitely were helping me to motivate to go outside and do things like that it wasn't so much of a "you said that you need to go outside more, so are you free right now?" like um not giving me a choice, but more of a, kind of encouraging me to know that like, that they want to spend time with me as well. . . and just to like help them to motivate me when I can't motivate myself (Jennifer, full treatment responder).

All participants felt supported and listened to by their therapist. Gary also described how being clear about what he needed to do meant he was able to progress in therapy, which enabled him to move forwards.

> We got on well definitely, I mean I never sort of felt like I wasn't being listened to, or I wasn't sort of, everything that we spoke about I understood, I didn't feel like I was missing anything or not understanding what I needed to do, and as a result I was able to get on with what I needed to do and make a better sort of progress with regards to my treatment (Gary, full treatment responder).

Although a minority view, doing things (both now and in the future), out of a sense of obligation and to live up to the expectations of others, could also get in the way of fully benefitting from the treatment. This was the case for Alice who said '[going to university] that's kind of, have to. It's not but everybody else in my family has so it kind of is like the normal' (Alice, mixed treatment responder).

Theme 3 – Feeling, acting, or seeing things differently: 'Looking forwards in a more healthy way'

Participants described a range of changes that they attributed to Brief BA treatment. Most accounts focused on positive changes but some highlighted lack of change and deterioration in some areas.

Experiencing enjoyment, excitement, and optimism: 'Before it was more a chore and now it's more a hobby'

A number of participants reported that they got more enjoyment and appreciation out of life as a result of Brief BA, with activities feeling like less of a 'chore' and more of a choice. Gary (full treatment responder) said '. . .there's a lot more enjoyment I get out of seeing my friend and Claire (mixed treatment responder), also commented, "I think there has been [a change], enjoyed actually seeing people rather than feeling like I had to"' (Claire, mixed treatment responder), feeling a greater sense of pleasure and a reduced sense of obligation.

The majority of participants also felt more positive towards the future. For example, Jasmine looked forward to things more. When asked how she pictured her future, she said 'I'm still with my boyfriend. I actually, I'm better at art, maybe selling my art, or doing something I enjoy' (Jasmine, full treatment responder). This was a very large shift from her initial account before treatment when she was not able to see any positive future for herself. Another participant had a much more positive view of the future in general,

> I'm looking forwards in a more healthy way. . . I guess the future's not so much of a negative, oh this isn't ever gonna end like kind of thing, it's a kind of like a, yay, yay university and studying and like the course itself is now really exciting to me (Jennifer, full treatment responder).

Some participants described experiencing feelings of boredom, with certain activities still not feeling fun, but also explained that they found this different from the pervasive lack of interest that they had experienced before they began treatment.

> I mean there are sometimes when I don't enjoy things, but I mean that's mainly associated with the fact that I procrastinate quite a lot, so it's mostly stuff to do with school, coursework, I'll just sort of put it off for a day or two, and as a result when it comes to actually doing it, I feel I haven't really achieved anything, but I mean that's my own problem (Gary, full treatment responder).

Feeling motivated, active, and energized: 'I find it a lot easier to get out of bed every morning'

Some participants described increased motivation to do leisure and social activities. For example, Adam said 'I'm more motivated to do stuff now' (Adam, mixed treatment responder). Similarly Gary stated, 'I've noticed I have a lot more motivation to do things, especially like at school' (Gary, full treatment responder).

Other participants described increased activity levels, including leisure activities, such as football, and playing games, going shopping, and spending time with other people. This tended to be linked to higher levels of motivation and an increased ability to complete school work and develop a better work–life balance.

> . . .beforehand I was quite far behind in, like with school work, but now I'm ahead of everyone else. With running I've started doing that, like even with crochet I've picked that up again (India, full treatment responder).

One participant, who did not appear to benefit from therapy, reported that she 'spent more time like walking the dog or going to gym, more exercise' (Ivy, treatment non-responder). She found being physically active was helpful for her mood, but her major difficulty was still overcoming very low levels of motivation.

Experiencing no shift or a transient reduction in anhedonia: 'I've gone down to zero'

Some participants reported that increased enjoyment and/or motivation was short-lived. Ivy (treatment non-responder) still had to force herself to do things, and although her motivation increased, this was temporary and soon returned to the same level as before,

> . . .after it ended [the therapy] it did make a difference, but kind of, it was better for a while, but it's kind of gone down-hill in the past couple of weeks (Ivy, treatment non-responder).

Alice also reported the same problems that she had been experiencing before treatment, which centred on difficulties with motivation and fatigue. A sense of apathy was also apparent in her tone throughout the interview. '. . .just like no energy, no motivation, like not really wanting to get up, like always tired, not sleeping very well (Alice, mixed treatment responder)'.

Even those who reported sustained improvements in their mood and symptoms after treatment, reported occasional episodes when they felt bad, 'I've gone down to zero for one day, I had a really bad week, did basically nothing' (Jasmine, full treatment responder).

Claire, who despite reporting important improvements in levels of anhedonia, general symptoms of depression and functioning after treatment, still identified that she had a negative outlook, and was resigned to this as a part of her personality.

> I'm still very pessimistic, but I don't think that will ever really change, I think that's just who I am (Claire, mixed treatment responder).

Experiencing increased anxiety as anhedonia (and depression) subside: 'Now that I'm happier, I'm more anxious'

As their symptoms of depression reduced some of the participants in the study reported that the intensity of their anxiety symptoms increased. For example, Jasmine said,

> I've had less anxiety attacks, but when I've had them they've been worse. . . Yeah they've taken a lot more energy out of me to calm them down. Think [after] every one I've gone home. . . I prefer to have them every few days and not have them as bad, than have them once every few days and have them bad (Jasmine, full treatment responder).

After treatment, India said that she felt a new lease of life, experiencing more enjoyment, fulfilment, and motivation. However, this made her also feel more anxious and worried about relapsing into feelings of boredom and depression.

> Yesterday like every hour five things were added to the list of things because I kept on picking them up because if I find myself with nothing do then I might get a little bit bored, then I might get a little bit down so I try and put too many things on my plate, but then with that I do get a bit more anxious, a bit more stressed. . .I think there's still a bit of a way to go, just because now I'm happier, so to speak, I'm more anxious about things, 'cos I'm thinking about school work more and think about the future a lot more (India, full treatment responder).

Discussion

This study explored adolescents' experiences of Brief Behavioural Activation treatment for depression. The young people who took part in this study were referred to a UK NHS child and adolescent mental health service and had received a primary diagnosis of depression at assessment. Brief BA is a positively focused treatment, focusing on making small but important changes to improve a young person's experience of life. The main aim of Brief BA treatment is to increase positive reinforcement for healthy behaviours through identifying intrinsically rewarding activities (Pass *et al.*, 2015). Therefore, given the theoretical specificity of positive reinforcement (a core component of Brief Behavioural Activation) on mood and behaviour we were interested in participants' accounts of the

impact of Brief BA treatment on their experience of anhedonia. Broadly speaking, adolescents self-reported questionnaire scores reflected their level of anhedonia and depression severity and improvement described during interview. Younger participants did less well than older participants; but it was unclear if this related to developmental factors or differences in their individual experiences.

Thematic analysis of semi-structured interviews after treatment ended yielded a number of themes. Those who experienced a positive shift in mood and motivation typically attributed this to a combination of specific Brief BA strategies such as connecting with values and taking part in valued activities even when unmotivated as well as generic psychotherapy processes, of self-monitoring and goal setting. Adolescents identified learning processes (e.g., discovering values) and practical applications of strategies learned from therapy (e.g., acting despite feelings). It is important to note that this form of BA (Brief BA; Pass & Reynolds, 2014) is based on one of the two main contemporary BA approaches, BATD (Lejuez *et al*., 2001, 2011). While the BA intervention developed by Martell *et al*. (2010, 2011) shares the same underlying behavioural principles as BATD (Lejuez *et al*., 2001, 2011), it does not include explicit focus on values and also includes additional treatment components (e.g., a more comprehensive formulation, greater focus on avoidance behaviours). Therefore, adolescents may report slightly different experiences of non-values-based BA and the impact on their symptoms of anhedonia.

When successful, the strategies in Brief BA helped address challenges in all parts of the reward system, namely anticipatory pleasure and expectations, approach motivation, approach behaviour, in the moment pleasure, and learning/ integrating information (as outlined in Figure 2). For most participants, strategies such as 'identifying values' and 'reflecting on experiences' were identified by young people as some of the most helpful strategies that resulted in the most change, particularly with increasing their motivation and their feelings of pleasure in the moment. Other strategies such as breaking down goals and linking feelings and behaviours helped 'kickstart' their movement towards positively reinforcing activities, with the hope that once there, they would feel pleasure in the moment. Reflection, connecting with values, and taking ownership of recovery in the long term all helped adolescents to learn from their experiences, and led them to think and act differently moving forwards beyond their time in therapy. Concepts such as developing autonomy were also identified in a qualitative study exploring adolescents' changes after Psychodynamic Therapy (Løvgren, Røssberg, Nilsen, Engebretsen, & Ulberg, 2019) and so likely play a role in a number of treatments.

For the younger adolescents in this study who did not respond to the treatment (Ivy and Alice), it is possible that they were less able to engage with these approaches to begin with (i.e., identifying values) and/ or that they were less able to translate what they had experienced (i.e., I felt better when I saw my friends even though I didn't want to) to other situations beyond therapy. It is also possible that Brief BA may lack the components needed to elicit change in anhedonia for some young people. Further quantitative research is needed to understand the specific mechanisms of change in BA, for immediate and longer-term recovery.

Particular barriers prevented some adolescents from fully benefitting from the treatment. Academic pressures, reduced energy and motivation, and lack of support from others all acted to prevent or reduce an increased sense of momentary pleasure and positive affect. Another important barrier to engaging in treatment was the perception that academic demands were currently their highest priority. Academic pressures meant that the positive emotions they would typically feel when engaging in a non-academic activity were dampened due to feelings of guilt and pre-occupation with what they felt

they *should* be doing, which also stopped them from *wanting* to do anything other than work.

Adolescents also identified that some symptoms of depression, namely motivational anhedonia and fatigue, interfered with treatment engagement. Lack of motivation and energy were direct barriers to wanting to, and actually engaging in, activities. This lowered satisfaction and positive affect, because pushing past the low motivation led to a sub-optimal performance, which did not elicit positive feelings of achievement and satisfaction, and consequently was not positively reinforcing. It would be interesting to assess whether adolescents who report ongoing motivational difficulties at the end of treatment had specific difficulties engaging with Brief BA strategies.

For most participants, other people supported their engagement in treatment and helped mitigate problems with low motivation. Feeling supported by others acted as a motivator, helping adolescents to want to engage in activities and also to physically put effort in to take part. In contrast, one participant (Alice) took part in the therapy and completed homework tasks at the request of a parent, meaning she acted out of a sense of obligation, and was not being driven by future feelings of reward, and as a result, these experiences were not positively reinforcing. When asked, all adolescents described having a positive relationship with their therapist; however, the therapeutic alliance did not feature strongly within participants' narratives. However, it is likely that a good relationship was a necessary underlying factor which enabled participants to engage in the specific therapeutic strategies discussed, as participants did not make negative comments about their relationship with their therapist.

A number of participants experienced both depression and anxiety prior to treatment. For some individuals, they felt generally happier and more positive after treatment, which may support Kashdan (2007) work on the presence of positive affect dysregulation in anxiety. However, the impact of Brief BA on anxiety needs to be explored in future work. For a minority of participants, feelings of anxiety and apprehension were both a barrier and a potential side effect of Brief BA treatment, even in the context of successful therapy. Feeling anxious or uncertain resulted in feelings of nervous apprehension in advance of an activity (even if they thought they would find it pleasurable), or uncertainty about wanting to engage in therapy early in the process. During treatment, this was likely due to a hesitancy to engage in activities that would elicit both anxiety and pleasure simultaneously, that is, spending time in town with friends (something that was enjoyed) and being in a crowded place (which made her feel anxious). Therefore, in some instances fear could over-ride adolescents' willingness to engage in an activity and/or their ability to feel more happy/positive when taking part. A minority of young people who experienced less depression after treatment reported increased anxiety and apprehension about the future, and about the possibility of relapse. Their accounts suggest that for some participants, relief from symptoms of depression may unmask more subtle symptoms of anxiety. It is plausible that after a prolonged period of depression and of not caring about the future some adolescents felt excited about what was to come but they were also apprehensive about what they had missed out on, and about what they were going to do next. Given that co-morbid anxiety disorders and depression are common, additional focused interventions for anxiety or modular treatments for commonly co-occurring mental health conditions may also be useful (e.g., Chorpita & Weisz, 2009) as might greater focus on strategies identified in transdiagnostic treatments to increase positive affect (e.g., Craske, Meuret, Ritz, Treanor & Dour 2016).

In comparison with their reports of anhedonia prior to treatment (see Watson *et al.*, 2019), most participants reported improvements in 'enjoyment in the moment' and

'looking forward to experiences', as well as feeling generally more hopeful, optimistic, and positive about the future. Before treatment, some participants found it hard to imagine a positive future for themselves, particularly in the short term. In the longer term, many had goals or things they wanted to achieve, but did not necessarily attach these to feeling happy and positive. After Brief BA, several participants felt more positive about the future. Roepke and Seligman (2016) have suggested that imagining a positive future requires experience of a good past; therefore, after Brief BA, participants positive experiences in (and out of) therapy (i.e., identifying values, acting in line with these values, feeling more positive) might have helped adolescents build an image of a more positive future. It is important to note that for some participants clinical improvement was short-lived, and thus, participants may have benefitted from additional or alternative strategies. A number of treatments have been recently developed to specifically target anhedonia in depression [Augmented Depression Therapy (ADePT; Dunn *et al*., 2018)] and across disorders [Positive Affect Treatment (PAT; Craske et al., 2016, Craske *et al*., 2019)], and these may contain elements could be adapted for adolescents and incorporated into Behavioural Activation.

In comparison with their experiences before treatment, many participants experienced a greater sense of purpose and connection with others, especially in allowing others to support them. The motivational component of reward, that is, wanting to do things/putting in effort (motivational anhedonia) sometimes increased in line with other aspects of reward; however, sometimes (and for specific individuals) low motivation and/or fatigue was a primary barrier to engaging in therapy, experiencing positive reinforcers, and therefore to any improvement in anhedonia and other symptoms of depression. This difficulty suggests that when low motivation prevents young people from engaging in positively reinforced behaviours, explicit and targeted strategies to increase motivation should be incorporated in psychological treatments for adolescent depression. It would be beneficial to understand specific mechanisms that are blocking the repair of anhedonia in adolescents. For example, it might be helpful to target cognitions that reduce positive affect, such as dampening appraisals, for example, 'this is too good to last' and enhance motivation (Dunn *et al*., 2020; Yilmaz et al., 2019).

A strength of this study is that participants were recruited from a publicly funded mental health service in the UK and their diagnosis of depression was confirmed using the gold standard K-SADs semi-structured clinical interview. This is the first study that has focused on adolescents' experiences of anhedonia after a structured, standardized psychological treatment. The research team had a broad range of expertise, including clinical psychologists who developed Brief BA [LP and SR] and non-clinical researchers [RW, KH, and CM]. It is important to note the possibility of researcher allegiance bias. However, the first author and two other authors have no allegiance towards this treatment approach. In addition, therapy was delivered independently of the research team. Limitations of the sampling included a lack of geographical and ethnic diversity. This study also included a modest sample size. We employed a reflexive thematic analysis approach (Braun & Clarke, 2019a) which suggests that concepts of saturation are not consistent with the values and assumptions of reflexive types of thematic analysis and are not coherent with a post-positivist perspective to scientific discovery (Braun & Clarke, 2019b). However, we acknowledge the possibility that other divergent views could have been captured with a larger sample, and this may have enabled us to garner a more nuanced understanding of the experiences of treatment responders and non-responders. As participants in this study were recruited from an outpatient community service, further exploration is needed into adolescents' experiences of Brief BA and its impact on

anhedonia in young people with more severe depression. In addition, because the focus of this study was on anhedonia, the effect of Brief BA on other symptoms depression (e.g., suicidal ideation or cognitive disturbances) was not explored.

Conclusions

Anhedonia is a core symptom of depression that has been identified as having an important role in maintaining depression maintenance and in relapse. Depressed adolescents who received Brief BA treatment described changes in their enjoyment, excitement, and motivation after treatment, as well as potential treatment barriers of anxiety, fatigue, academic pressures and motivation. Young people also identified specific Brief BA strategies (such as reconnecting with values) and more generic therapeutic strategies (such as self-monitoring) as helpful ways to reduce their experiences of anhedonia.

Acknowledgements

The authors would like to thank the research clinic staff for their involvement in recruitment and assessment of clinical participants. This study has been funded by an Economic and Social Research Council (ESRC) PhD studentship.

Conflicts of interest

All authors declare no conflict of interest.

Author contributions

Rebecca Watson (Conceptualization; Data Curation; Formal analysis; Investigation; Methodology; Writing – original draft) Kate Harvey (Conceptualization; Methodology; Supervision; Writing – review and editing) Laura Pass (Formal analysis; Writing – review and editing) Ciara McCabe (Conceptualization; Supervision) Shirley Reynolds (Conceptualization; Formal analysis; Supervision; Writing – review and editing).

Data availability statement

This is a qualitative study, which is sensitive in nature, and therefore, data are not available online.

References

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Angold, A., Costello, E. J., & Pickles, A. (1987). *The development of a questionnaire for use in epidemiological studies of depression in children and adolescents*. London, UK: Medical Research Council Child Psychiatry Unit.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019a). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*, 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2019b). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 1–16. https://doi.org/10.1080/2159676X.2019.1704846

Bringhurst, D. L., Watson, C. W., Miller, S. D., & Duncan, B. L. (2006). The reliability and validity of the Outcome Rating Scale: A replication study of a brief clinical measure. *Journal of Brief Therapy*, *5*, 23–30.

Brown, T. A., Barlow, D. H., & DiNardo, P. A. (1994). *Anxiety Disorders Interview Schedule for DSM-IV (ADIS-IV): Client interview schedule*. Boulder, CO: Graywind Publications Incorporated.

Child Outcomes Research Consortium (2016). *Errata: Child- and parent-reported outcomes and experience from child and young people's mental health services 2011–2015*. Retrieved from https://www.corc.uk.net/media/1174/201612child_and_parent-reported_outcomes_and_experience_from_child_and-young_peoples_mental_health_services_2011-2015_erratum.pdf

Chorpita, B. F., & Weiz, J. R. (2009). *Modular approach to therapy for children with anxiety, depression, trauma, or Conduct problems (MATCH-ADTC)*. Satellite Beach, FL: PracticeWise.

Clark, L. A., & Watson, D. (1991). Tripartite model of anxiety and depression: Psychometric evidence and taxonomic implications. *Journal of Abnormal Psychology*, *100*, 316–336. https://doi.org/10.1037/0021-843X.100.3.316

Clayborne, Z. M., Varin, M., & Colman, I. (2019). Systematic review and meta-analysis: Adolescent depression and long-term psychosocial outcomes. *Journal of the American Academy of Child and Adolescent Psychiatry*, *58*(1), 72–79. https://doi.org/10.1016/j.jaac.2018.07.896

Craske, M. G., Meuret, A. E., Ritz, T., Treanor, M., Dour, H., & Rosenfield, D. (2019). Positive affect treatment for depression and anxiety: A randomized clinical trial for a core feature of anhedonia. *Journal of Consulting and Clinical Psychology*, *87*, 457–471. https://doi.org/10.1037/ccp0000396

Craske, M. G., Meuret, A. E., Ritz, T., Treanor, M., & Dour, H. J. (2016). Treatment for anhedonia: A neuroscience driven approach. *Depression and Anxiety*, *33*(10), 927–938. https://doi.org/10.1002/da.22490

Dunn, B. D., German, R. E., Khazanov, G., Xu, C., Hollon, S. D., & DeRubeis, R. J. (2020). Changes in positive and negative affect during pharmacological treatment and cognitive therapy for major depressive disorder: A secondary analysis of two randomized controlled trials. *Clinical Psychological Science*, *8*(1), 36–51. https://doi.org/10.1177/2167702619863427

Dunn, B. D., Widnall, E., Reed, N., Owens, C., Campbell, J., & Kuyken, W. (2019). Bringing light into darkness: A multiple baseline mixed methods case series evaluation of Augmented Depression Therapy (ADepT). *Behaviour Research and Therapy*, *120*, 103–418. https://doi.org/10.1016/j.brat.2019.103418

Dunn, B. D., Burr, L. A., Smith, H. B., Hunt, A., Dadgostar, D., Dalglish, L., Smith, S., ... Werner-Seidler, A. (2018). Turning gold into lead: Dampening appraisals reduce happiness and pleasantness and increase sadness during anticipation and recall of pleasant activities in the laboratory. *Behaviour Research and Therapy*, *107*, 19–33. https://doi.org/10.1016/j.brat.2018.05.003

Forbes, C. N. (2020). New directions in behavioral activation: Using findings from basic science and translational neuroscience to inform the exploration of potential mechanisms of change. *Clinical Psychology Review*, *79*, 101860. https://doi.org/10.1016/j.cpr.2020.101860

Goodyer, I. M., Reynolds, S., Barrett, B., Byford, S., Dubicka, B., Hill, J., ... Fonagy, P. (2017). Cognitive behavioural therapy and short-term psychoanalytical psychotherapy versus a brief psychosocial intervention in adolescents with unipolar major depressive disorder (IMPACT): A multicentre, pragmatic, observer-blind, randomised controlled superiority trial. *Lancet Psychiatry*, *4*(2), 109–119. https://doi.org/10.1016/S2215-0366(16)30378-9

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook Qualitative Research*, *3*, 105–117.

Halahakoon, D. C., Kieslich, K., O'Driscoll, C., Nair, A., Lewis, G., . . . Roiser, J. P. (2020). Reward Processing Behavior in Depressed Participants Relative to Healthy Volunteers: A Systematic Review and Metaanalysis. *JAMA Psychiatry*, 1–10. https://doi.org/10.1001/jamapsychiatry.2020.2139

Harper, D., & Thompson, A. R. (2011). *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners*. Hoboken, NJ: Wiley.

Kashdan, T. B. (2007). Social anxiety spectrum and diminished positive experiences: Theoretical synthesis and meta-analysis. *Clinical Psychology Review*, *27*(3), 348–365. https://doi.org/10.1016/j.cpr.2006.12.003

Kaufman, J., Birmaher, B., Brent, D., Rao, U., Flynn, C., Moreci, P. . . . Ryan, N. (1997). Schedule for affective disorders and schizophrenia for school-age children-present and lifetime version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*, 980–988. https://doi.org/10.1097/00004583-199707000-00021

Khazanov, G. K., & Ruscio, A. M. (2016). Is low positive emotionality a specific risk factor for depression? A meta-analysis of longitudinal studies. *Psychological Bulletin*, *142*, 991–1015. https://doi.org/10.1037/bul0000059

Khazanov, G. K., Xu, C., Dunn, B. D., Cohen, Z. D., DeRubeis, R. J., & Hollon, S. D. (2020). Distress and anhedonia as predictors of depression treatment outcome: A secondary analysis of a randomized clinical trial. *Behaviour Research and Therapy*, *125*, 103507. https://doi.org/10.1016/j.brat.2019.103507

Kring, A. M., & Barch, D. M. (2014). The motivation and pleasure dimension of negative symptoms: Neural substrates and behavioral outputs. *European Neuropsychopharmacology*, *24*, 725–736. https://doi.org/10.1016/j.euroneuro.2013.06.007

Lejuez, C. W., Hopko, D. R., Acierno, R., Daughters, S. B., & Pagoto, S. L. (2011). Ten year revision of the brief behavioral activation treatment for depression: Revised treatment manual. *Behavior Modification*, *35*(2), 111–161. https://doi.org/10.1177/0145445510390929

Lejuez, C. W., Hopko, D. R., & Hopko, S. D. (2001). A Brief Behavioral activation treatment for depression: Treatment manual. *Behavior Modification*, *25*(2), 255–286. https://doi.org/10.1177/0145445501252005

Løvgren, A., Røssberg, J. I., Nilsen, L., Engebretsen, E., & Ulberg, R. (2019). How do adolescents with depression experience improvement in psychodynamic psychotherapy? A qualitative study. *BMC Psychiatry*, *19*(1), 95. https://doi.org/10.1186/s12888-019-2080-0

Martell, C. R., Addis, M. E., & Jacobson, N. S. (2001). *Depression in context: Strategies for guided action*. New York: W. W. Norton.

Martell, C. R., Dimidjian, S., & Herman-Dunn, R. (2010). *Behavioral activation for depression: A clinician's guide*. New York, NY: Guilford Press.

Mazzucchelli, T. G., Kane, R. T., & Rees, C. S. (2010). Behavioral activation interventions for well-being: A meta-analysis. *The Journal of Positive Psychology*, *5*(2), 105–121. https://doi.org/10.1080/17439760903569154

McCabe, C. (2018). Linking anhedonia symptoms with behavioural and neural reward responses in adolescent depression. *Current Opinion in Behavioural Sciences*, *22*, 143–151. https://doi.org/10.1016/j.cobeha.2018.07.001

McCauley, E., Gudmundsen, G., Schloredt, K., Martell, C., Rhew, I., Hubley, S., & Dimidjian, S. (2016). The adolescent behavioral activation program: Adapting behavioral activation as a treatment for depression in adolescence. *Journal of Clinical Child and Adolescent Psychology*, *45*, 291–304. https://doi.org/10.1080/15374416.2014.979933

McMakin, D. L., Olino, T. M., Porta, G., Dietz, L. J., Emslie, G., Clarke, G., . . . Brent, D. A. (2012). Anhedonia predicts poorer recovery among youth with selective serotonin reuptake inhibitor treatment resistant depression. *Journal of the American Academy of Child and Adolescent Psychiatry*, *51*, 404–411. https://doi.org/10.1016/j.jaac.2012.01.011

NICE (2018). *Depression in adults: Recognition and management*. Retrieved from https://www.nice.org.uk/guidance/cg90/chapter/1-Guidance

NICE (2019). *Depression in children and young people: Identification and management*. Retrieved from https://www.nice.org.uk/guidance/ng134/chapter/Recommendations

NVivo Qualitative Data Analysis Software (2018). *QSR International Pty Ltd., Version 12*.

Orchard, F., Pass, L., Marshall, T., & Reynolds, S. (2016). Clinical characteristics of adolescents referred for treatment of depressive disorders. *Child and Adolescent Mental Health*, *22*(2), 61–68. https://doi.org/10.1111/camh.12178

Pass, L., Brisco, G., & Reynolds, S. (2015). Adapting brief Behavioural Activation (BA) for adolescent depression: A case example. *The Cognitive Behaviour Therapist*, *8*, e17. https://doi.org/10.1017/S1754470X15000446

Pass, L., & Reynolds, S. (2014). *Treatment manual for Brief Behavioural Activation for depressed adolescents (Brief BA)*. Unpublished manual. Reading, UK: University of Reading.

Pass, L., Lejuez, C. W., & Reynolds, S. (2018). Brief Behavioural Activation (Brief BA) for adolescent depression: A pilot study. *Behavioural and Cognitive Psychotherapy*, *46*(2), 182–194. https://doi.org/10.1017/S1352465817000443

Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual Research Review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry*, *56*, 345–365. https://doi.org/10.1111/jcpp.12381

Rizvi, S. J., Pizzagalli, D. A., Sproule, B. A., & Kennedy, S. H. (2016). Assessing anhedonia in depression: Potentials and pitfalls. *Neuroscience and Biobehavioral Reviews*, *65*, 21–35. https://doi.org/10.1016/j.neubiorev.2016.03.004

Roepke, A. M., & Seligman, M. E. P. (2016). Depression and prospection. *British Journal of Clinical Psychology*, *55*(1), 23–48. https://doi.org/10.1111/bjc.12087

Rzepa, E., & McCabe, C. (2019). Dimensional anhedonia and the adolescent brain: Reward and aversion anticipation, effort and consummation. *British Journal of Psychiatry (Open)*, *5*(e99), 1–9. https://doi.org/10.1192/bjo.2019.68

Saldaña, J. (2015). *The coding manual for qualitative researchers*. London, UK: Sage.

Silverman, W. K. (1996). *Anxiety disorders interview schedule for DSM-IV: Parent interview schedule*. Oxford, UK: Oxford University Press.

Snaith, R. P., Hamilton, M., Morley, S., Humayan, A., Hargreaves, D., & Trigwell, P. (1995). A scale for the assessment of hedonic tone the Snaith-Hamilton Pleasure Scale. *British Journal of Psychiatry*, *167*(1), 99–103. https://doi.org/10.1192/bjp.167.1.99

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, *19*, 349–357. https://doi.org/10.1093/intqhc/mzm042

Treadway, M. T., & Zald, D. H. (2011). Reconsidering anhedonia in depression: Lessons from translational neuroscience. *Neuroscience & Biobehavioral Reviews*, *35*, 537–555. https://doi.org/10.1016/j.neubiorev.2010.06.006

Vrieze, E., Demyttenaere, K., Bruffaerts, R., Hermans, D., Pizzagalli, D. A., Sienaert, P., … Claes, S. (2014). Dimensions in major depressive disorder and their relevance for treatment outcome. *Journal of Affective Disorders*, *155*, 35–41. https://doi.org/10.1016/j.jad.2013.10.020

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063–1070. https://doi.org/10.1037/0022-3514.54.6.1063

Watson, R., Harvey, K., McCabe, C., & Reynolds, S. (2019). Understanding anhedonia: A qualitative study exploring loss of interest and pleasure in adolescent depression. *European Child and Adolescent Psychiatry*, *29*, 489–499. https://doi.org/10.1007/s00787-019-01364-y

Weisz, J. R., Kuppens, S., Ng, M. Y., Eckshtain, D., Ugueto, A. M., Vaughn-Coaxum, R., … Weersing, V. R. (2017). What five decades of research tells us about the effects of youth psychological therapy: A multilevel meta-analysis and implications for science and practice. *American Psychologist*, *72*(2), 79–117. https://doi.org/10.1037/a0040360

Wood, A., Kroll, L., Moore, A., & Harrington, R. (1995). Properties of the mood and feelings questionnaire in adolescent psychiatric outpatients: A research note. *Journal of Child Psychology and Psychiatry*, *36*(2), 327–334. https://doi.org/10.1111/j.1469-7610.1995.tb01828.x

Yilmaz, M., Psychogiou, L., Javaid, M., Ford, T., & Dunn, B. D. (2019). Making the worst of a good job: Induced dampening appraisals blunt happiness and increase sadness in adolescents during pleasant memory recall. *Behaviour Research and Therapy*, *122*, 103476. https://doi.org/10.1016/j.brat.2019.103476

Received 5 March 2020; revised version received 28 July 2020

Supporting Information

The following supporting information may be found in the online edition of the article:

Data S1. Training for Delivering Diagnostic Assessments.