The Effectiveness of Mindfulness Based Cognitive Therapy for Social Anxiety Symptoms in People

Living with Alopecia Areata: A single-group case-series design

Dr Connor Heapy[1]

Professor Paul Norman[1]

Dr Sarah Cockayne[2]

Professor Andrew R Thompson[1,4*]

[1] Department of Psychology, University of Sheffield, Cathedral Court, 1 Vicar Lane, Sheffield, S1 2LT, U.K.

[2] Sheffield Teaching Hospitals NHS Foundation Trust, Royal Hallamshire Hospital, Glossop Road, Sheffield, S10 2JF.

[5] Cardiff University, 11th Floor, Tower Building, 70 Park Place, Cardiff, CF10 3AT

* Address for correspondence/present address: Professor A. R. Thompson, Programme Director, Doctoral Programme in Clinical Psychology, Cardiff University, 11th Floor, Tower Building, 70 Park Place, Cardiff, CF10 3AT, thompsona18@cardiff.ac.uk, +44(0)2920870582

Conflicts of interest:

No conflicts of interest to declare.

Data Availability Statement:

 Data are available upon reasonable request from the corresponding author.

The effectiveness of mindfulness-based cognitive therapy for social anxiety symptoms in people living with alopecia areata: A multiple-baseline single-group case series design

Abstract:

Background: Alopecia Areata (AA) is an immunological disorder characterised by hair loss. Individuals with AA report high levels of social anxiety. One intervention that holds potential for reducing social anxiety in individuals with AA is mindfulness-based cognitive therapy (MBCT).

Aims: Our key aim was to investigate whether MBCT reduces social anxiety in individuals with AA. The study also investigated whether MBCT reduces depression, general anxiety, and increases quality of life and increases trait mindfulness in individuals with AA.

Method: Five participants with AA took part in an 8-session in-person MBCT intervention. A multiple-baseline single-group case series design was adopted. Idiographic measures of social anxiety were measured each day from baseline, through intervention, to follow-up. Standardised questionnaires of trait mindfulness, social anxiety, depression, anxiety, and quality of life were completed at baseline, post-intervention, and at 4-week follow-up.

*Results***:** All participants completed the MBCT course, but one participant was excluded from the idiographic analysis due to a high amount of missing data. The remaining four participants demonstrated reductions in idiographic measures of social anxiety from baseline to follow-up. These effects were larger between baseline and follow-up, than baseline and post-intervention. Two participants demonstrated significant improvement in standardised measures of wellbeing from baseline to follow-up – they also practised mindfulness most regularly at home between sessions.

Conclusion: MBCT may be effective in reducing social anxiety and improving wellbeing in individuals with AA, although this might be dependent on the extent to which participants regularly practise mindfulness exercises.

Key words: alopecia areata; mindfulness; MBCT; social anxiety; single case experimental design

Alopecia areata (AA) is an immunological disorder that affects around $0.1\% - 0.2\%$ of people worldwide (Islam, Leung, Huntley, & Gershwin, 2015). AA is characterised by small patches of non-scarring hair loss, and in more severe forms leads to total hair loss on the scalp (alopecia totalis) or total hair loss of the entire body (alopecia universalis). Treatment options for AA are limited, particularly for more severe forms (Islam et al., 2015).

While the physical effects of AA are limited, the psychological effects can be profound. Hair is a central aspect of appearance and self-image for many people, and can express a person's gender, age, ethnicity, and social or political beliefs (Freedman, 1994). Indeed, AA has a significant negative impact on quality of life (Rencz et al., 2016) and individuals with AA experience higher levels of anxiety and depression than controls (Hunt & McHale, 2005; Ruiz-Doblado, Carrizosa, & García-Hernández, 2003). Hair loss can also negatively impact an individual's sense of identity and self-esteem—particularly for groups of individuals whose hair is given high importance by sociocultural norms (Tucker, 2009). For example, sexuality, attractiveness, and personality are more symbolically linked to a woman's hair than a man's hair (Hunt & McHale, 2005), and women report that problems adjusting to their condition are exacerbated because baldness in women is not socially acceptable (Hunt & McHale, 2004). Consequently the psychosocial impact of AA is typically more severe in women than men (Aukerman & Jafferany, 2022).

When considering the social importance often placed on hair, it is perhaps unsurprising that one particularly prevalent difficulty for individuals with AA is social anxiety. In one of the largest surveys conducted into the psychosocial impact of AA, almost half of participants (47.5%) reported clinically significant levels of social anxiety, compared with around a third of participants reporting clinically significant levels of depression (29%) and general anxiety (35.5%) (total n = 338; Montgomery et al., 2017). People living with AA have reported unhelpful reactions from others, such as negative comments, staring, and comparisons with people undergoing chemotherapy treatment (Montgomery et al., 2017; Wiggins, Moore-Millar, & Thomson, 2014). For some people, fear of

negative reactions from others can lead to use of concealment strategies such as wearing a wig or avoidance of social situations altogether (Montgomery et al., 2017; Wiggins et al., 2014). Avoiding social contact likely increases an individual's sense of loneliness, which in turn increases feelings of depression and general anxiety (Beutel et al., 2017). Reducing social anxiety in individuals with AA will therefore likely have a broad and significant positive impact on their lives.

Cognitive models of social anxiety disorder emphasize the role of self-focused attention and rumination in the maintenance of symptoms (Clark & Wells, 1995, Rapee & Heimberg, 1997). Social situations trigger anxiety, with individuals viewing their audience as critical observers. Attention is biased towards threat-related social cues that the individual interprets as indicators of negative evaluation which, in turn, increases anxiety (Hirsch & Clark, 2004; Morrison & Heimberg, 2013). Whilst people with AA experience negative reactions from people, research suggest they display a stigmatization bias, in the form of increased attention towards disease-related cues (Van Beugen et al., 2016). Interventions which aim to reduce engagement in negative appearance-related thoughts, and attentional bias towards negative self-referential information, may be helpful for people with AA.

One group of interventions that may be helpful are based on mindfulness principles. Mindfulness is defined as "paying attention in a particular way: on purpose in the present moment and non-judgementally" (Kabat-Zinn, 1994, p.4). Higher levels of trait mindfulness are related to lower levels of social anxiety in individuals diagnosed with social phobia (Schmertz et al., 2012) and individuals with skin conditions (Montgomery et al., 2016). Mindfulness-based stress reduction (MBSR)—a structured group intervention based on mindfulness principles—has been shown to reduce negative self-referential processing and emotional reactivity, and increase self-esteem, in people with social phobia (Goldin, Ramel, & Gross, 2009; Goldin et al., 2012; Goldin, Ziv, Jazeri, Hahn, and Gross, 2013). In addition, in a pilot study of individuals with AA, MBSR reduced distress and increase quality of life (Gallo et al., 2017).

Mindfulness-based cognitive therapy (MBCT) is a similar intervention to MBSR but draws on elements of cognitive therapy and places more importance on understanding cognitions and psychological processes. The National Institute of Clinical Excellence recommend MBCT for reducing relapse risk in depression (NICE, 2009) and the processes involved in maintaining depression, such as rumination and attention bias towards negative stimuli, are also relevant to social anxiety (Clark & Wells, 1995). In the only study to compare MBCT with cognitive-behavioural therapy (CBT) for social anxiety, Piet et al. (2010) allocated 26 adults with a diagnosis of social phobia to group MBCT or group CBT in a crossover design. Both MBCT and CBT showed pre-post improvements in a composite measure of social anxiety. Moreover, no differences were found in social anxiety between MBCT and CBT following therapy at 6-month follow-up, or at 12-month follow-up.

However, whilst both CBT and MBCT hold promise for reducing social anxiety in individuals with AA, there are several benefits to investigating the impact of MBCT. First, although CBT is effective for social anxiety, approximately 40-50% of people referred for therapy show little or no improvement, and alternative options are therefore needed (Hofmann & Bögels, 2006; Rodebaugh et al., 2004). Second, developing the evidence-base for MBCT—a relatively under-researched intervention—could increase client choice, which in turn could increase client engagement and outcomes (Constantino et al., 2021). Finally, drop-out rates may be lower in MBCT than CBT, indicating MBCT is preferred by clients and may be more cost-effective. For example, a review of mindfulness and acceptance-based interventions for anxiety disorders found a mean attrition rate of 15% (Vøllestad et al., 2012); whereas a review of CBT for anxiety disorders found a mean attrition rate of 24% (Carptener et al., 2018).

Despite the potential benefits of investigating whether MBCT reduces social anxiety in individuals with AA, no studies have been conducted to answer this question. However, Fordham et al. (2014) investigated the effectiveness of MBCT in another dermatology sample—individuals with psoriasis. Although the study did not assess social anxiety, interviews following the intervention

found participants reported feeling calmer, more confident, and more sociable. This finding suggests MBCT may improve self-efficacy in dealing with social interactions, in turn reducing social anxiety.

The current study is the first to investigate the effectiveness of MBCT for people with AA in reducing social anxiety. The study also aimed to examine whether MBCT reduces depression and general anxiety, and improves quality of life and trait mindfulness, in individuals with AA. This group intervention is an adapted version of MBCT for depression (Segal, Williams, & Teasdale, 2013), with sessions including psychoeducation on social anxiety, experiential practice of mindfulness meditation, and group discussion. The study will adopt a multiple-baseline single-group case series design, whereby wellbeing and mindfulness variables are assessed before, during, and after the intervention. Single-case designs are commonly used in clinical research, particularly in the preliminary stages of investigation (Morley, 2017). Adopting this design also enables the measurement of idiographic targets—deemed as important to individual participants—each day. Unlike randomized controlled trials, this design ensures that the impact of the intervention on key individual problems is assessed in detail over time (Morley, 2017). Accordingly, we were most interested in the impact of the MBCT intervention on participants' idiographic measures of social anxiety.

Method

Design

This study adopted an A-B multiple-baseline, single-group case series design, with a follow-up period. Phase A was a two- to four-week baseline period. Phase B was an eight-session group intervention run over nine weeks (mindfulness-based cognitive therapy; MBCT). The follow-up period lasted four-weeks during which participants were encouraged to continue to practise mindfulness regularly. A single follow-up intervention session was run during the fourth week of the follow-up period. Outcome variables were assessed at frequencies typical of single-case designs (Morley, 2018). That is, the main outcome variable was two daily idiographic questions assessing social anxiety. Secondary outcome variables were standardised measures of the following variables, administered at three time points: mindfulness, social anxiety, general anxiety, depression, and quality of life.

Participants

Seven participants were recruited to the study from social media, outpatient dermatology clinics, and an alopecia charity event. One participant dropped out before the first session due to practical reasons. One participant attended the MBCT intervention but was excluded from the analyses due to not having a diagnosis of alopecia areata, leaving a total of five participants in the study. Inclusion criteria were i) aged 16 or over, ii) primary health concern was alopecia areata (including alopecia totalis, and alopecia universalis), iii) self-identified as experiencing social anxiety, iv) English language speaker. Exclusion criteria were i) active thoughts of suicide or self-harm, ii) experienced psychotic episode in the last 12 months, iii) currently engaged with other psychological talking therapies or due to start during the study period. No participants dropped out from the study after attending the first session. Participants demographic information is included in Table 1. The MBCT intervention was free for participants and travel costs were reimbursed.

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Measures

Demographic and medical

Demographic and medical information was collected at the start of the study. Participants reported their gender, age, ethnicity, diagnosis, and duration of AA (see Table 1).

Idiographic measures of social anxiety and mindfulness practice

Social anxiety was assessed by two idiographic questions that were chosen by the participants and completed each day. These questions represented areas of social anxiety that participants wanted to address. Question 1 was decrease-framed (i.e. something the participant wanted to decrease; e.g. "*How affected have you been today by people looking at your head/hair?*") and Question 2 was increase-framed (i.e. something the participant wanted to increase; e.g. "*How brave have you felt today (e.g. when in social situations and around others)?*"). Questions were rated on a scale from 0 ("not at all") to 100 ("extremely"). Idiographic questions were completed by participants each day from baseline until the follow-up session.

Participants were also asked to indicate how many minutes they had spent practising mindfulness each day, from the start of the intervention period until the follow-up session.

Standardised measures

Participants completed measures of the following constructs at three time points (pre-intervention, post-intervention, follow-up): mindfulness, social anxiety, depression, general anxiety, and quality of life.

Mindfulness was assessed using the The Five Facet Mindfulness Questionnaire (FFMQ: Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). This 39-item self-report questionnaire assesses five facets of mindfulness: observing, describing, act with awareness, non-judgement of inner experience, and non-reactivity to inner experience. Items are rated on a 5-point Likert scale and

responses are summed. The FFMQ has demonstrated good psychometric properties in nonclinical

samples and individuals with anxiety disorders (Baer et al., 2006; Bohlmeijer, ten Klooster,

Fledderus, Veehof, Baer, 2011).

Social anxiety was assessed using the Brief Fear of Negative Evaluation, Straightforward

items (BFNE-S: Carleton, Collimore, McCabe, & Antony, 2011; Rodebaugh et al., 2004; Weeks et al.,

2005). This 8-item self-report questionnaire assesses social anxiety as a single factor. Items are rated

on a 5-point Likert scale and responses are summed. Scores of 25 or over suggest clinical levels of

social anxiety (Carelton et al., 2011). The BFNE-S has demonstrated good psychometric properties in

individuals with anxiety disorders (Careleton et al., 2011), and has previously been used to assess

social anxiety in individuals with AA (Montgomery et al., 2016). This brief measure of social anxiety

was chosen to limit participant burden.

Depression was assessed using the Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, &

Williams, 1999). This 9-item self-report questionnaire measures symptoms of depression over the

previous two weeks. Items are rated on a 4-point Likert scale and responses are summed. Scores of

ten or more suggest clinical levels of depression (Kroenke, Spitzer, & Williams, 2001). The PHQ-9 has

demonstrated good psychometric properties in primary care patients (Kroenke et al., 2001).

General anxiety was assessed using the Generalised Anxiety Disorder Questionnaire (GAD-7;

Spitzer, Kronke, Williams, & Lowe, 2006). This 7-item self-report questionnaire measures symptoms

of generalized anxiety over the previous two weeks. Items are rated on a 4-point Likert scale and

responses are summed. Scores of 8 or more suggest clinical levels of anxiety (Kroenke, Spitzer,

Williams, Monahan, & Löwe, 2007). The GAD-7 has demonstrated good psychometric properties in

primary care patients (Kroenke et al., 2001).

Quality of life was assessed using the Dermatology Quality of Life Index (DLQI: Findlay &

Khan, 1994). This 10-item self-report questionnaire assesses the impact of a skin condition on quality

of life over the last week. The DLQI has been adapted to refer to hair loss specifically, rather than

skin condition more generally. Items are rated on a 4-point Likert scale and responses are summed. Higher scores suggest poorer quality of life. The DLQI has demonstrated good psychometric properties in individuals with a range of skin conditions, including alopecia areata (Basra, Fenech, Gatt, Salek, & Finlay, 2008).

Procedure

Participants were first interviewed in-person for their eligibility. Those that were eligible were randomly allocated to a two, three, or four-week baseline period. During the eligibility interview, participants were asked to identify two target idiographic measures of social anxiety that were sent to them each day using an online text message service (ConnectTxt). Participants responded to the questions with numerical scores by replying to the text message. Participants completed paper copies of the standardised questionnaires. Participants attended the MBCT groups in-person at the University of <removed for blind review>. Ethical approval was granted by the <removed for blind review> ethics committee. Authors have abided by the Ethical Principles of Psychologists and Code of Conduct as set out by the BABCP and BPS.

Intervention description

The MBCT intervention followed the protocol outlined by Segal et al. (2013), with adaptations to psychoeducation material to focus on social anxiety rather than depression. The group consisted of eight sessions and one follow-up session. Each session lasted two and a half hours and participants were taught how to apply mindfulness to their lives. Participants were encouraged to carry out home practice each week based on the contents of each session. Each session involved a review of home practice (e.g. mindful movement meditation), a formal meditation practice (e.g. breathing meditation), and group discussion around a theme (e.g. "thoughts are not facts"; see Supplementary Materials for full outline).

Treatment Fidelity

The intervention was led by an accredited mindfulness teacher with experience of running MBCT groups, and experience of working with people with social anxiety. The mindfulness teacher received clinical supervision as part of his existing NHS role. One session was video-recorded at random for fidelity review using the Mindfulness-Based Interventions Teaching Assessment Criteria (MBI:TAC; Crane et al., 2013) by another experienced mindfulness teacher. Six elements of the mindfulness teaching were assessed using criteria ranging from 1 ("incompetent") to 6 ("advanced").

Data analysis

Daily responses to idiographic measures were graphed in Microsoft Excel and inspected for change (in means), trend, and variability across phases (Morley, 2017).

Idiographic data were analysed with Tau-U (Parker, Vannest, Davis, & Sauber, 2011) using an online calculator (Vannest, Parker, Gonen, & Adiguzel, 2016). Tau-U examines percentage of data non-overlap between each of the study phases (baseline, intervention, follow-up). Baseline scores were first assessed for trend, using the calculator, and any significant trend was corrected. Missing values were imputed using the Expectation-Maximization procedure (Dempster, Laird, & Rubin, 1977; Smith, Borckardt, & Nash, 2013). Weighted averages were also calculated for each idiographic measure using the same online calculator. One participant was excluded from the idiographic data analysis due to a high amount of missing data.

Changes in scores on secondary outcome measures (BFNE-S, FFMQ subscales, PHQ-9, GAD-7, DLQI) between pre-intervention, post-intervention, and follow-up, were investigated using Jacobson's reliable change index (Jacobson & Truax, 1991). This method demonstrates statistically reliable improvement or deterioration in standardised questionnaires. Reliable change criteria were calculated using means and standard deviations of the measures found in existing research data. The analyses were carried out using the Leeds Reliable Change Calculator (Morley & Dowzer, 2014).

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Results

Participant characteristics can be seen in Table 1.

<Table 1 here>

Idiographic measures

Visual Analysis

See Figures 1 and 2 for the graphs of each parent's responses to the decrease-framed and increase-framed idiographic social anxiety measures. Mean weekly scores were calculated from daily responses over the course of the study (see Supplementary Materials for daily graphs).

Question 1 – Decrease-framed idiographic social anxiety

Participant 1 demonstrated a slight reduction, and downward trend, in their decrease-framed idiographic measure of social anxiety in the intervention and follow-up phases, relative to the baseline phase. They also showed low variability in social anxiety across baseline, intervention, and follow-up phases.

Participant 2 demonstrated a slight reduction in their decrease-framed idiographic measure of social anxiety in the intervention and follow-up phases, relative to the baseline phase. They demonstrated a slight upward trend in social anxiety across the baseline phase, but this trend levelled out during the intervention phase and reversed in the follow-up phase. Participant 2 showed high variability in scores in the baseline and intervention phase, but this reduced in the follow-up phase.

Participant 3 showed a large reduction in their decrease-framed idiographic measure of social anxiety in the intervention and follow-up phases, relative to the baseline phase. They also demonstrated prominent downward trend in social anxiety across the intervention phase, and this levelled out in the follow-up phase. Participant 3 showed moderate variability in scores across phases.

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Participant 4 showed a large reduction, and downward trend, in their decrease-framed idiographic measure of social anxiety in the intervention and follow-up phases, relative to the baseline phase. They showed moderate variability in scores across phases.

<Figure 1 here>

Question 2 – Increase-framed idiographic social anxiety

Participant 1 showed no noticeable change, or trend, in their increase-framed idiographic measure of social anxiety across phases.

Participant 2 demonstrated a slight improvement in their increase-framed idiographic measure of social anxiety in the follow-up phase, relative to baseline phase. They showed some downward trend in social anxiety during the baseline phase, but this reversed to a positive trend in the intervention phase, and then levelled out during the follow-up phase. Participant 2 showed moderate variability across phases.

Participant 3 showed a moderate increase in their increase-framed idiographic measure of social anxiety in the intervention and follow-up phases, relative to the baseline phase. Participant 3 also showed a slight downward trend in social anxiety during the baseline phase, but this was reversed in the intervention phase and continued as a positive trend in the follow-up phase. They showed moderate variability in scores across all phases.

Participant 4 showed a moderate increase, and upward trend, in their increase-framed idiographic measure of social anxiety in the intervention and follow-up phases, relative to the baseline phase. They showed low variability in scores across all phases.

<Insert Figure 2 here>

Tau-U Analysis

All four participants demonstrated significant improvements in their decrease-framed (Question 1) idiographic measure of social anxiety from baseline to intervention, and from baseline to follow-up. Weighted average of all participants also demonstrated overall significant

improvement in social anxiety (Question 1) from baseline to intervention, and baseline to follow-up (see Table 2).

Only two of the participants (3 and 4) demonstrated significant improvements in their increase-framed (Question 2) idiographic measure of social anxiety from baseline to intervention, and from baseline to follow-up. Weighted average of all participants showed overall significant improvement in social anxiety (Question 2) from baseline to intervention, and baseline to follow-up (see Table 2).

<Table 2 here>

Standardised measures

Jacobson Reliable Change

The following scores were considered as reliable change for each measure: BFNE-S = 5; FFMQ O = 7; FFMQ D = 6; FFMQ AwA = 6; FFMQ NJ = 7; FFMQ NR = 7; PHQ-9 = 6; GAD-7 = 4; DLQI = 6 (see Table 3).

Two participants (3 & 4) showed reliable improvement in social anxiety from baseline to post-intervention and follow-up. Three participants (3, 4, & 5) showed reliable improvement in at least one mindfulness facet from baseline to post-intervention or follow-up. Three participants (3 & 4) showed reliable improvement in depression or anxiety from baseline to post-intervention or follow-up. Two participants (3 & 4) showed reliable improvement in quality of life from baseline to post-intervention or follow-up.

<Table 3 here>

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

3.4 Home practice

Participant 5 practised mindfulness at home the least (*M* = 3 minutes per day), followed by participant 1 and 2 (*M* = 12 minutes per day), and participant 3 (*M* = 20 minutes per day). Participant 4 practised the mindfulness at home the most *(M* = 25 minutes; see Table 1.)

3.5 Treatment fidelity

The mindfulness teacher scored 4 ("competent") or higher in each domain, confirming treatment fidelity.

Discussion

We investigated the effectiveness of MBCT for people with AA in reducing social anxiety, depression, general anxiety, and improving quality of life. To achieve this, we used a multiple-baseline single-group case series design and measured wellbeing variables across a baseline, intervention, and follow-up period. All participants showed improvements in idiographic measures of social anxiety from baseline to post-intervention, and baseline to follow-up. In addition, two of the five participants showed improvement in at least one wellbeing measure from baseline to post-intervention or follow-up. Finally, two of the participants showed an increase in trait mindfulness from baseline to follow-up. Overall, our adaptation of MBCT shows promise in reducing distress associated with AA.

Our key finding was that the MBCT intervention reduced scores on idiographic measures of social anxiety in individuals with AA. Participants in the group intervention likely developed a range of mindfulness skills that contributed to reduced social anxiety. For example, by viewing thoughts as "just thoughts", participants may have begun to disengage from negative appearance-related thoughts. By paying close, non-judgmental, attention to internal and external stimuli, participants may have reduced their attentional bias towards negative-self-referential information. Indeed, participants who reported practising mindfulness most between sessions also saw the largest

reductions in social anxiety. Encouragingly, reductions in social anxiety were larger at the end of the follow-up period than at the end of the intervention period, as indicated by larger Tau scores. This finding suggests the positive effects of MBCT developed beyond the last formal teaching session.

Not all participants showed increases in trait mindfulness from baseline to follow-up, suggesting additional mechanisms may explain reduced social anxiety. One possibility is that MBCT developed skills or knowledge that were not captured by the questionnaire used to measure trait mindfulness. For example, the intervention included psychoeducation and participants learnt about the contributing role of self-focussed attention on maintaining anxiety—knowledge that could lead to reduced social anxiety but not necessarily an increase in trait mindfulness. Another mechanism we believe likely contributed to reductions in social anxiety is regular, weekly exposure to the other group participants. Cognitive-behavioural approaches for social anxiety highlight the benefit of exposure to social situations for reducing social anxiety (e.g. Clark & Wells, 1995). The three mechanisms described here—increased mindfulness, increased knowledge of social anxiety, increased exposure to social situations—are likely contributory, rather than mutually-exclusive.

We were also interested in the impact of the MBCT intervention on other aspects of the participants' wellbeing. Two of four participants showed improvements in quality of life from baseline to follow-up. These two participants also reported practising mindfulness most regularly at home, compared to other members of the group. The two participants who did not show improvements in quality of life, however, showed relatively little impairment at baseline, leaving little room for improvement through the intervention. Indeed, one participant scored so low on the quality of life measure that there was no room for reliable improvement. The effect of MBCT on depression and general anxiety was minimal, with only one participant showing a decrease in depression, and no participants showing a decrease in general anxiety, from baseline to follow-up, and this is perhaps unsurprising given that we focused on adapting MBCT to tackle social anxiety

type symptoms. In summary, MBCT appears beneficial in improving quality of life and social anxiety in those with AA who have particularly impaired quality of life.

Limitations and future directions

The generalizability of the findings is limited due to the small sample size. Nevertheless, it was appropriate to adopt a single-group experimental design in this early stage of investigating the effectiveness of MBCT with individuals with AA. Future studies should aim to investigate the feasibility and acceptability of MBCT compared with CBT in larger samples of individuals with AA through a pilot randomized-controlled trial. Allocating individuals with AA to a second control group, involving a weekly group discussion, would help to separate the benefits of mindfulness from the benefits of social exposure. Outcomes in the trial could include social anxiety, depression, anxiety, and quality of life. Attrition rates and cost-effectiveness could also be monitored, and qualitative methods could be used to explore client views of MBCT and CBT. The intervention could also be improved by acknowledging that participants' difficulties lie within a broader societal context. That is, many people with AA do receive negative reactions from others, such as staring and insults (e.g. Davey et al., 2019), and this could be acknowledged and discussed in an early session to reduce self-blame in the group members.

Recruitment to the current study was difficult, despite receiving support from a local dermatology clinic, relevant national charities, and local wig stores. This difficulty is understandable when considering that individuals experiencing social anxiety were invited to attend a regular group meet-up with people they do not know—meaning those who were most socially anxious may not have attended. That the intervention was run in-person may have also prevented people with disabilities or lack of transport from attending (although travel costs were reimbursed). Despite recruitment difficulties, the benefits of the group format (e.g. more cost-effective than individual therapy, shared experiences with other members, exposure to social situations) warrant further investigation. A pilot randomized-controlled trial would therefore benefit from a multi-site approach

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

with more targeted recruitment to potential participants, to clarify whether a large scale RCT would be feasible. Collecting data after a longer follow-up period would clarify whether the benefits of the intervention are long lasting. In addition, further single-group experimental designs would be useful in demonstrating the effectiveness of MBCT in more diverse samples of individuals with AA, such as men or individuals from minority ethnic backgrounds. The lack of diversity in mindfulness-based intervention studies is a broader issue, with samples typically consisting of White, educated, middle-aged females (Eichel et al., 2021). Diversifying samples may be achieved by increasing diversity within the research team (including the intervention facilitators), collaborating with marginalized communities, and carefully considering the intervention setting (e.g. running the group in a community centre, rather than at a university; Eichel et al., 2021). Finally, the importance of home practice should be emphasised to future participants, both during the screening process and during the mindfulness sessions, perhaps with a more focussed discussion around potential obstacles and ways of overcoming them.

In conclusion, MBCT appears beneficial in reducing social anxiety and improving wellbeing in some individuals with AA, particularly those who practise mindfulness at home regularly between sessions. Idiographic measures of social anxiety continued to reduce beyond formal MBCT teaching, suggesting the intervention may provide benefits beyond the final session.

References

Aukerman, E. L., & Jafferany, M. (2022). The psychological consequences of androgenetic alopecia: A systematic review. *Journal of Cosmetic Dermatology.* https://doi.org/10.1111/jocd.14983

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*, 27-45. https://doi.org/10.1177/1073191105283504

Basra, M. K. A., Fenech, R., Gatt, R. M., Salek, M. S., & Finlay, A. Y. (2008). The Dermatology Life Quality Index 1994–2007: a comprehensive review of validation data and clinical results. *British Journal of Dermatology*, *159*(5), 997-1035. https://doi.org/10.1111/j.1365-2133.2008.08832.x

Beutel, M. E., Klein, E. M., Brähler, E., Reiner, I., Jünger, C., Michal, M., ... & Tibubos, A. N. (2017). Loneliness in the general population: prevalence, determinants and relations to mental health. *BMC psychiatry, 17*(1), 1-7. https://doi.org/10.1186/s12888-017-1262-x

Bohlmeijer, E., Ten Klooster, P. M., Fledderus, M., Veehof, M., & Baer, R. (2011). Psychometric properties of the five facet mindfulness questionnaire in depressed adults and development of a short form. *Assessment, 18*(3), 308-320. https://doi.org/10.1177/1073191111408231

Carleton, R. N., Collimore, K. C., McCabe, R. E., & Antony, M. M. (2011). Addressing revisions to the Brief Fear of Negative Evaluation scale: Measuring fear of negative evaluation across anxiety and mood disorders. *Journal of Anxiety Disorders*, *25*, 822-828. https://doi.org/10.1016/j.janxdis.2011.04.002

Carpenter, J. K., Andrews, L. A., Witcraft, S. M., Powers, M. B., Smits, J. A., & Hofmann, S. G. (2018). Cognitive behavioral therapy for anxiety and related disorders: A meta-analysis of randomized placebo-controlled trials. *Depression and Anxiety, 35*(6), 502-514. https://doi.org/10.1002/da.22728

Clark, D., & Wells, A. (1995). A Cognitive Model of Social Phobia. In M. Heimberg, D. Biebowitz, & F.

Hope & Schneider (Eds.), *Social Phobia diagnosis, assessment and treatment* (pp.69-93). New

York, NY: Guilford Press.

Constantino, M. J., Bosweell, J. F., & Coyne, A. E. (2021). Patient, Therapist, and Relational Factors.

In Barkham, M., Lutz, W., Castonguay, L. G. (Eds.) *Bergin and Garfield's handbook of

psychotherapy and behavior change* (pp. 225-263). Wiley.

Crane, R. S., Eames, C., Kuyken, W., Hastings, R. P., Williams, J. M. G., Bartley, T., ... & Surawy, C.

(2013). Development and validation of the mindfulness-based interventions–teaching

assessment criteria (MBI: TAC). *Assessment*, *20*(6), 681-688.

https://doi.org/10.1177/1073191113490790

Davey, L., Clarke, V., & Jenkinson, E. (2019). Living with alopecia areata: an online qualitative survey

study. *British Journal of Dermatology*, *180*(6), 1377-1389. https://doi.org/10.1111/bjd.17463

Dempster, A., Laird, N., & Rubin, D. B. (1977). Maximum likelihood from incomplete data via the EM

algorithm. *Journal of the Royal Statistical Society*: *Series B (Methodological)*, *39*(1), 1–38.

https://doi.org/10.1111/j.2517-6161.1977.tb01600.x

Eichel, K., Gawande, R., Acabchuk, R. L., Palitsky, R., Chau, S., Pham, A., ... & Britton, W. (2021). A

retrospective systematic review of diversity variables in mindfulness research, 2000–2016.

Mindfulness, 12(11), 2573-2592. https://doi.org/10.1007/s12671-021-01715-4

Finlay, A. Y., & Khan, G. (1994). Dermatology Life Quality Index (DLQI)—a simple practical measure

for routine clinical use. *Clinical and Experimental Dermatology*, *19*(3), 210-216.

https://doi.org/10.1111/j.1365-2230.1994.tb01167.x

Fordham, B., Griffiths, C. E., & Bundy, C. (2015). A pilot study examining mindfulness-based cognitive therapy in psoriasis. *Psychological Health and Medicine, 20,* 121-127. https://doi.org/10.1080/13548506.2014.902483

Fordham, B. A., Nelson, P., Griffiths, C. E., & Bundy, C. (2014). The acceptability and usefulness of Mindfulness Based Cognitive Therapy (MBCT) for people living with psoriasis: A qualitative study. *British Journal of Dermatology*, *172,* 823-825. https://doi.org/10.1111/bjd.13333

Freedman, T. G. (1994). Social and cultural dimensions of hair loss in women treated for breast cancer. *Cancer Nursing*, *17*(4), 334-341. https://doi.org/10.1097/00002820-199408000-00006

Gallo, R., Chiorri, C., Gasparini, G., Signori, A., Burroni, A., & Parodi, A. (2017). Can mindfulness-based interventions improve the quality of life of patients with moderate/severe alopecia areata? A prospective pilot study. *Journal of the American Academy of Dermatology, 76*, 757-759. https://dx.doi.org/10.1152/ajplegacy.1931.98.4.636

Goldin, P., Ramel, W., & Gross, J. (2009). Mindfulness meditation training and self-referential processing in social anxiety disorder: Behavioral and neural effects. *Journal of Cognitive Psychotherapy, 23*, 242-257. https://doi.org/10.1891/0889-8391.23.3.242

Goldin, P., Ziv, M., Jazaieri, H., & Gross, J. (2012). Randomized controlled trial of mindfulness-based stress reduction versus aerobic exercise: effects on the self-referential brain network in social anxiety disorder. *Frontiers in Human Neuroscience, 6*, 295. https://doi.org/10.3389/fnhum.2012.00295

Goldin, P., Ziv, M., Jazaieri, H., Hahn, K., & Gross, J. J. (2013). MBSR aerobic exercise in social anxiety: fMRI of emotion regulation of negative self-beliefs. *Social Cognitive and Affective Neuroscience, 8*, 65-72. https://doi.org/10.1093/scan/nss054

Hirsch, C. R., & Clark, D. M. (2004). Information-processing bias in social phobia. *Clinical Psychology Review*, *24*, 799-825. https://doi.org/10.1016/j.cpr.2004.07.005

Hunt, N., & McHale, S. (2004). Reported experiences of persons with alopecia areata. *Journal of Loss and Trauma, 10*(1), 33-50. https://doi.org/10.1080/15325020490890633

Hunt, N., McHale, S. (2005). The psychological impact of alopecia. *BMJ*, *331*, 951-953. https://dx.doi.org/10.1136/bmj.331.7522.951

Islam, N., Leung, P., Huntley, A., Gershwin, M. (2015). The autoimmune basis of alopecia areata: A comprehensive review. *Autoimmunity Reviews 14(2),* 81-89. https://dx.doi.org/10.1016/j.autrev.2014.10.014

Jacobson N. S, Truax P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal Consulting and Clinical Psychology*, *59*(1), 12-19. https://doi.org/10.1037/0022-006x.59.1.12

Kabat-Zinn, J. (1994). Wherever you go, there you are: mindfulness meditation in everyday life. New York : Hyperion.

Kroenke, K., Spitzer, R.L., & Williams, J.B. (2001) The PHQ-9. *Journal of General Internal Medicine*, *16.* 606-13. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

Kroenke K, Spitzer R. L., Williams J. B. W., Monahan P. O., Löwe B. (2007). Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, *146*(5), 317–25. https://doi.org/10.7326/0003-4819-146-5-200703060-00004

Montgomery, K., Norman, P., Messenger, A. G., & Thompson, A. R. (2016). The importance of mindfulness in psychosocial distress and quality of life in dermatology patients. *British Journal of Dermatology*, *175*(5), 930-936. https://doi.org/10.1111/bjd.14719

Montgomery, K., White, C., & Thompson, A. (2017). A mixed methods survey of social anxiety,

anxiety, depression and wig use in alopecia. *BMJ open*, *7*(4), 1-6.

http://dx.doi.org/10.1136/bmjopen-2016-015468

Morley, S. (2018). *Single case methods in clinical psychology: A practical guide*. Routledge.

Morley, S.,Dowzer, C.N. (2014). Manual for the Leeds Reliable Change Indicator: Simple

Excel[(tm)]applications for the analysis of individual patient and group data. University of Leeds,

Leeds, UK.

Morrison, A. S., & Heimberg, R. G. (2013). Social anxiety and social anxiety disorder. *Annual Review

of Clinical Psychology*, *9*, 249-274. https://doi.org/10.1146/annurev-clinpsy-050212-185631

National Institute for Health and Clinical Excellence (NICE) (2009). *Depression in adults: Recognition

and management.* UK: National Institute for Health and Clinical Excellence.

Parker, R. I., Vannest, K. J., Davis, J. L., & Sauber, S. B. (2011). Combining nonoverlap and trend for

single-case research: Tau-U. *Behavior Therapy*, *42*(2), 284–99.

https://doi.org/10.1016/j.beth.2010.08.006

Piet, J., Hougaard, E., Hecksher, M. S., & Rosenberg, N. K. (2010). A randomized pilot study of

mindfulness based cognitive therapy and group cognitive behavioral therapy for young adults

with social phobia. *Scandinavian Journal of Psychology*, *51*, 403-410.

https://doi.org/10.1111/j.1467-9450.2009.00801.x

Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioral model of anxiety in social phobia.

Behaviour Research and Therapy, *35*, 741-756. doi: https://doi.org/10.1016/s0005-

7967(97)00022-3

Rencz, F., Gulácsi, L., Péntek, M., Wikonkál, N., Baji, P., Brodszky, V. (2016). Alopecia areata and

health-related quality of life: a systematic review and meta-analysis. *British Journal of

Dermatology, 175*(3), 561-571. https://dx.doi.org/10.1111/bjd.14497

Rodebaugh, T. L., Woods, C. M., Thissen, D., Heimberg, R. G., Chambless, D. L., & Rapee, R. M. (2004). More information from fewer questions: The factor structure and item properties of the original and brief fear of negative evaluation scales. *Psychological Assessment*, *16*, 169-181. https://doi.org/10.1037/1040-3590.16.2.169

Ruiz-Doblado, S., Carrizosa, A., & García-Hernández, M.J. (2003) Alopecia areata: psychiatric comorbidity and adjustment to illness. *International Journal of Dermatol*ogy, *42.* 434-7. https://doi.org/10.1046/j.1365-4362.2003.01340.x

Schmertz, S.K., Masuda, A., & Anderson, P.L. (2012) Cognitive processes mediate the relation between Mindfulness and Social Anxiety within a Clinical Sample. *Journal of Clinical Psychology*, *63*, 362-371. https://doi.org/10.1002/jclp.20861

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2013). *Mindfulness-based cognitive therapy for depression* (2nd ed.). The Guilford Press.

Spitzer, R.L., Kroenke, K., & Williams, J.B. (1999) Patient Health Questionnaire Primary Care Study Group. Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. *JAMA, 282*, 1737-44. https://doi.org/10.1001/jama.282.18.1737

Smith, J., Borckardt, J., Nash, M. (2011). Inferential precision in single-case time-series data streams: how well does the EM procedure perform when missing observations occur in autocorrelated data? *Behavior Therapy 43*(3), 679-85. https://doi.org/10.1016/j.beth.2011.10.001

Tucker, P. (2009). Bald is beautiful? The psychosocial impact of alopecia areata. *Journal of Health Psychology*, *14*(1), 142-151. https://doi.org/10.1177/1359105308097954

Van Beugen, S., Maas, J., van Laarhoven, A. I., Galesloot, T. E., Rinck, M., Becker, E. S., ... & Evers, A. W. (2016). Implicit stigmatization-related biases in individuals with skin conditions and their significant others. *Health Psychology*, *35*, 861. https://doi.org/10.1037/hea0000404
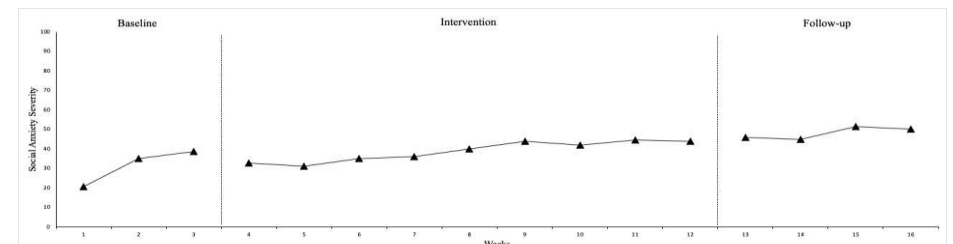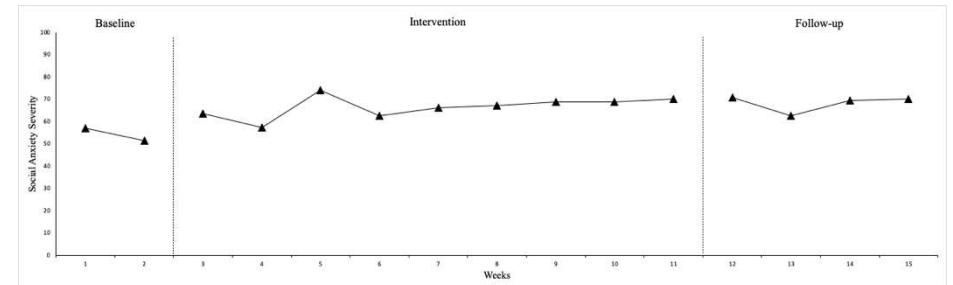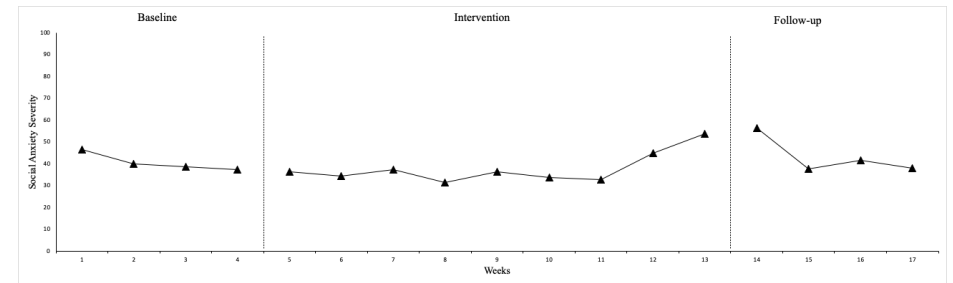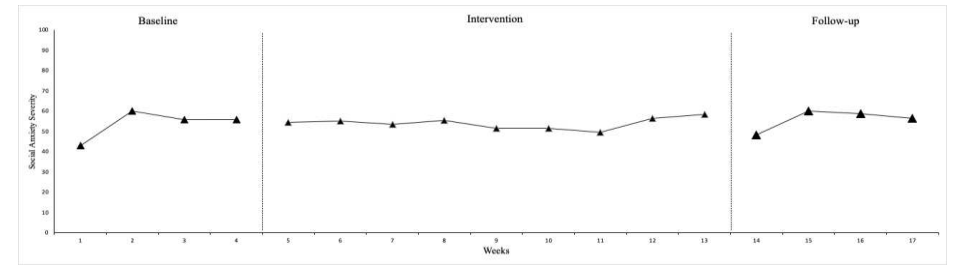
Vannest, K.J., Parker, R.I., Gonen, O., & Adiguzel, T. (2016). Single Case Research: web based

    calculators for SCR analysis. (Version 2.0) [Web-based application]. College Station, TX: Texas

    A&M University. Retrieved Monday 29th June 2020. Available from singlecaseresearch.org

Vøllestad, J., Nielsen, M. B., & Nielsen, G. H. (2012). Mindfulness-and acceptance-based

    interventions for anxiety disorders: A systematic review and meta-analysis. *British Journal of*

    Clinical Psychology, 51(3), 239-260. https://doi.org/10.1111/j.2044-8260.2011.02024.x

Weeks, J. W., Heimberg, R. G., Fresco, D. M., Hart, T. A., Turk, C. L., Schneier, F. R., & Liebowitz, M.

    R. (2005). Empirical validation and psychometric evaluation of the Brief Fear of Negative

    Evaluation Scale in patients with social anxiety disorder. *Psychological Assessment, 17,* 179-

    190. https://doi.org/10.1037/1040-3590.17.2.179

Wiggins, S., Moore-Millar, K., & Thomson, A. (2014). Can you pull it off? Appearance modifying

    behaviours adopted by wig users with alopecia in social interactions. *Body image*, *11,* 156-66.

    https://doi.org/10.1016/j.bodyim.2014.01.004

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Fig. 1. Weekly averages of daily scores for decrease-framed (on the left) idiographic ("*How affected have you been today by people looking at your head/hair*") and increased-frame (on the right) social anxiety questions (*How brave have you felt today- e.g., when in social situations*").

Participant 1 to 4

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Table 1. Demographic and clinical information of participants.

Participant	Sex	Age	Ethnicity	Diagnosis	Duration of alopecia areata	Mindfulness sessions attended (out of 9)	Mindfulness minutes practised (mean per day)
1	Female	37	White British	Alopecia Areata	10 years	7	12 minutes
2	Female	41	White British	Alopecia Totalis	30 years	8	12 minutes
3	Female	24	White French Canadian	Alopecia Universalis	1 year	7	20 minutes
4	Female	41	White British	Alopecia Universalis	14 years	8	25 minutes
5	Female	37	White British	Alopecia Totalis	2 years	6	3 minutes

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Table 2. Tau-U results for decrease and increase framed questions for each participant

		Decrease-framed idiographic stress measure (question 1)				Increase-framed idiographic stress measure (Question 2)			
Participant	Comparisons	Tau	SDTau	*P*	CI (90%)	Tau	SDTau	*P*	CI (90%)
1	Baseline-Intervention	-0.39	0.11	0.003	-0.607<>-0.173	0.03	0.13	0.79	-0.18<>0.25
	Baseline-Follow-up	-0.78	0.15	<0.001	-1<>-0.52	0.14	0.15	0.38	-0.12<>0.67
	Intervention-Follow-up	-0.57	0.13	<0.001	-0.79<>-0.36	0.10	0.13	0.44	-0.11<>0.32
2	Baseline-Intervention	-0.42	0.13	0.001	-0.64<>-0.21	-0.11	0.13	0.40	-0.33<>0.11
	Baseline-Follow-up	-0.60	0.15	<0.001	-0.85<>-0.34	-0.11	0.15	0.44	-0.13<>0.37
	Intervention-Follow-up	-0.10	0.13	0.45	-0.31<>0.12	0.27	0.13	0.04	0.05<>0.48
3	Baseline-Intervention	-0.53	0.17	0.002	-0.81<>-0.25	0.46	0.17	0.008	0.18<>0.74
	Baseline-Follow-up	-0.94	0.19	<0.001	-1.00<>-0.63	0.56	0.19	0.003	0.25<>0.88
	Intervention-Follow-up	-0.54	0.13	<0.001	-0.75<>-0.32	0.12	0.13	0.34	-.091<>0.34
4	Baseline-Intervention	-0.64*	0.15	<0.001	-0.88<>-0.40	0.33*	0.14	0.022	0.093<>0.58
	Baseline-Follow-up	-0.78*	0.17	<0.001	-1.00<>-0.51	0.70*	0.17	<0.001	0.43<>0.98
	Intervention-Follow-up	-0.91	0.13	<0.001	-1.00<>0.70	0.69	0.13	<0.001	0.47<>0.91
Weighted average	Baseline-Intervention	-0.49	-	<0.001	-0.61<>-0.37	0.16	-	0.03	0.04<>0.28
	Baseline-Follow-up	-0.77	-	<0.001	-0.90<>-0.63	0.37	-	<0.001	0.23<>0.50
	Intervention-Follow-up	-0.41	-	<0.001	-0.52<>-0.31	0.29	-	<0.001	0.19<>0.40

*= baseline corrected

Table 3 Scores at three timepoints, across the intervention, on standardised measures of social anxiety, mindfulness (all five facets), depression, general anxiety, and quality of life.

	Participant 1			Participant 2			Participant 3			Participant 4			Participant 5		
	Baseline	Post-intervention	Follow-up	Baseline	Post-intervention	Follow-up	Baseline	Post-intervention	Follow-up	Baseline	Post-intervention	Follow-up	Baseline	Post-Intervention	Follow-up
Social Anxiety (BFNE-S)	31	32	32	23	26	26	31	21^I	25^I	36	27^I	26^I	34	32	32
Observe (FFMQ)	23	21	21	29	23	26	29	38^I	37^I	27	35^I	35^I	29	35	24
Describe (FFMQ)	24	14^D	16^D	23	24	23	25	31	32^I	18	17	25^I	27	17^D	24
Act with awareness (FFMQ)	27	19^D	19^D	23	26	22	20	27^I	22	12	26^I	24^I	22	26	20
Non-judgement (FFMQ)	21	18	21	21	24	22	18	27^I	28^I	23	22	24	16	22	18
Non-reactivity (FFMQ)	23	19	20	21	19	20	14	22^I	20	13	24^I	23^I	16	24^I	20
Depression (PHQ-9)	7	7	5	2	3	1	14	13	10	16	14	8^I	13	14	18
Anxiety (GAD-7)	8	8	7	6	5	8	13	7^I	12	16	7^I	14	17	16	18
Quality of life (DLQI)	2	0	0	6	4	5	20	11^I	13^I	21	20	12^I	3	Missing	Missing

^{I} Indicates reliable improvement from baseline score
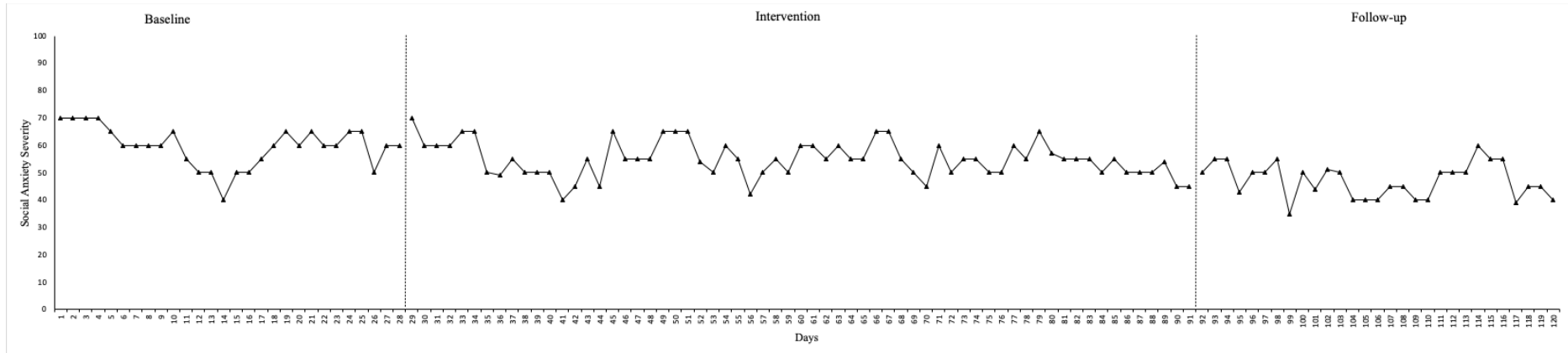
^{D} Indicates reliable deterioration from baseline score

Supplementary files

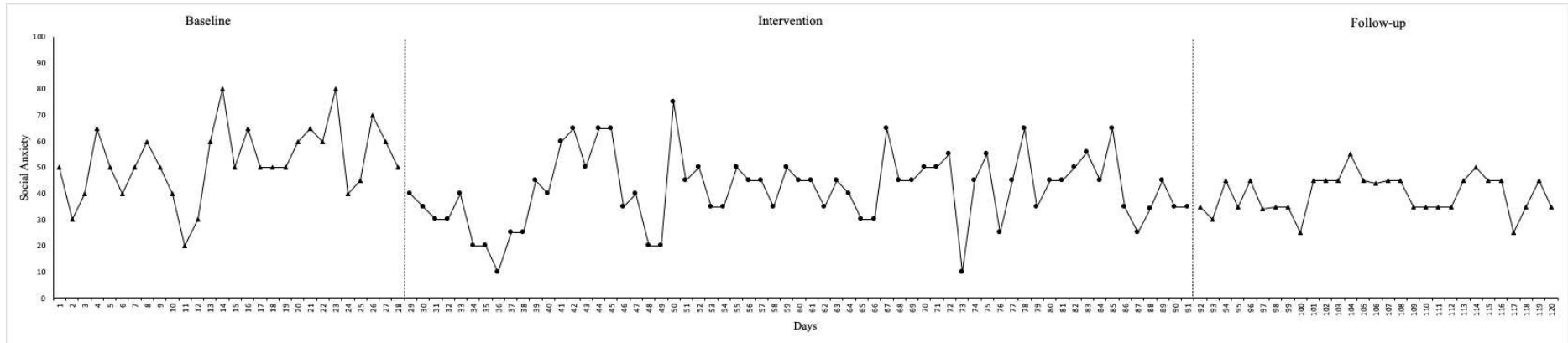## Daily social anxiety symptom severity ratings for increase- and decrease-framed questions.

Question 1 – Decrease-framed idiographic social anxiety
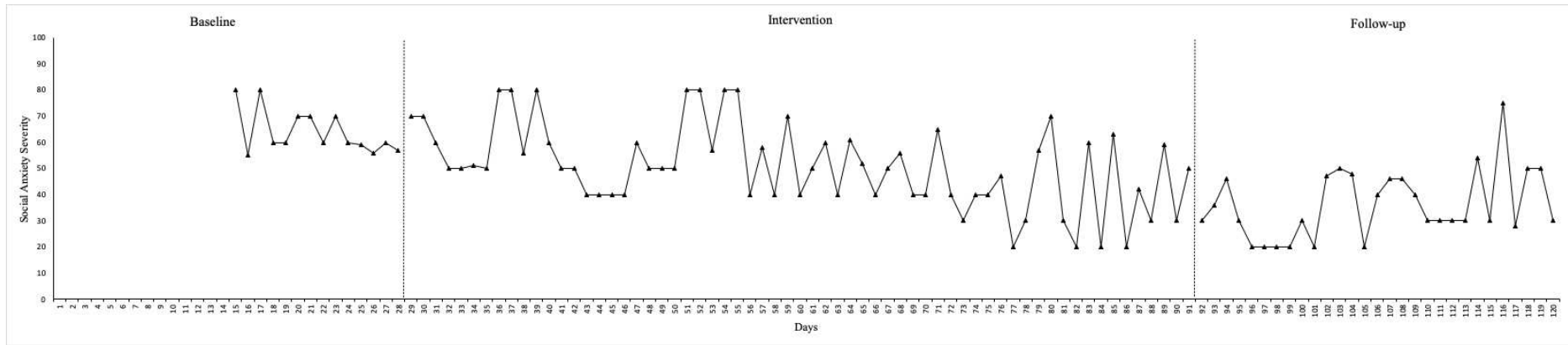
Participant 1

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA
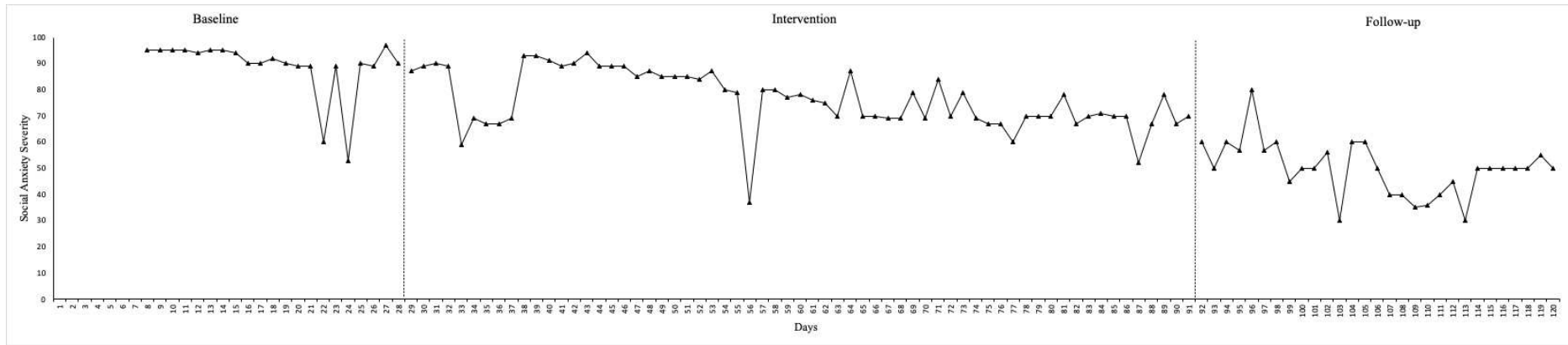
Participant 2

Participant 3

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA
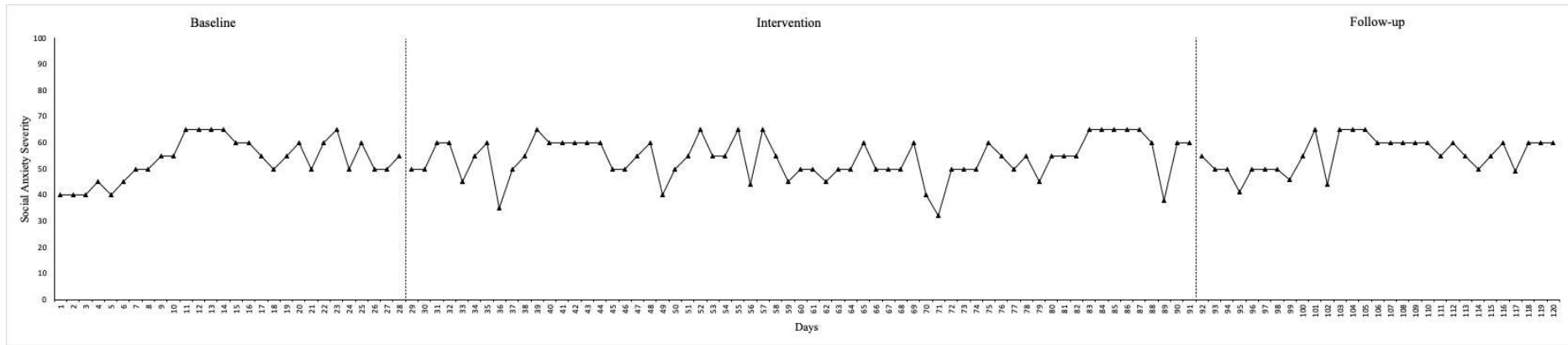

Participant 4

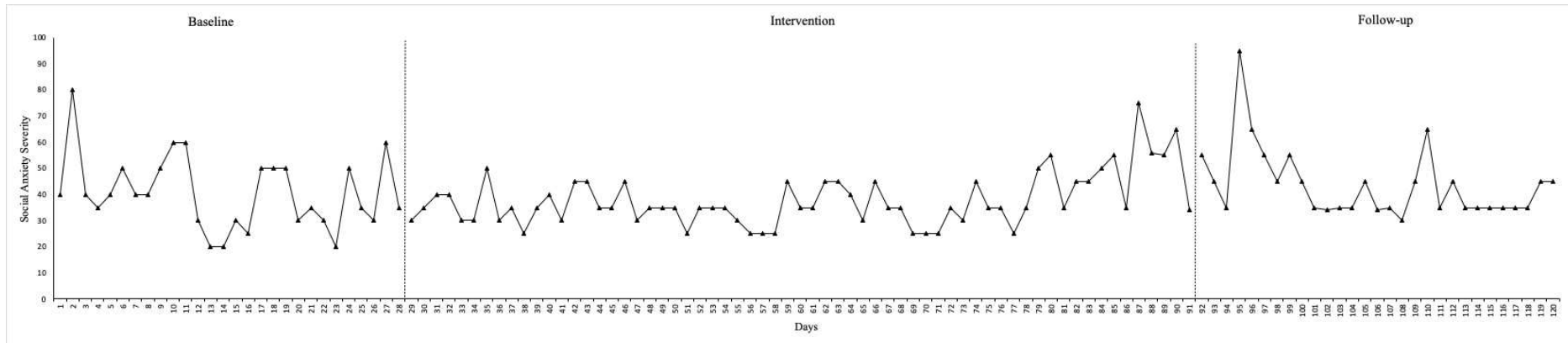MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Question 2 – Increase-frame idiograhpic social anxiety

Participant 1
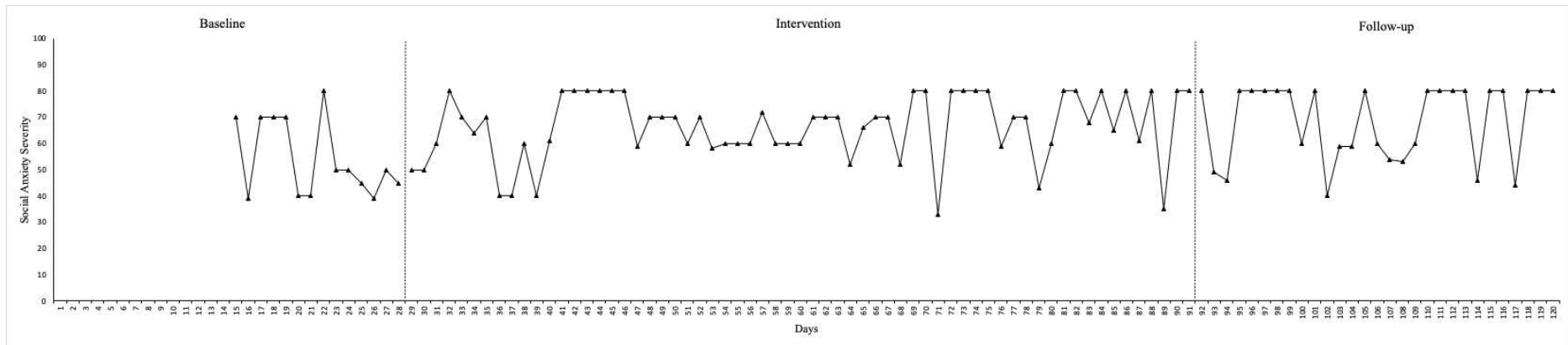
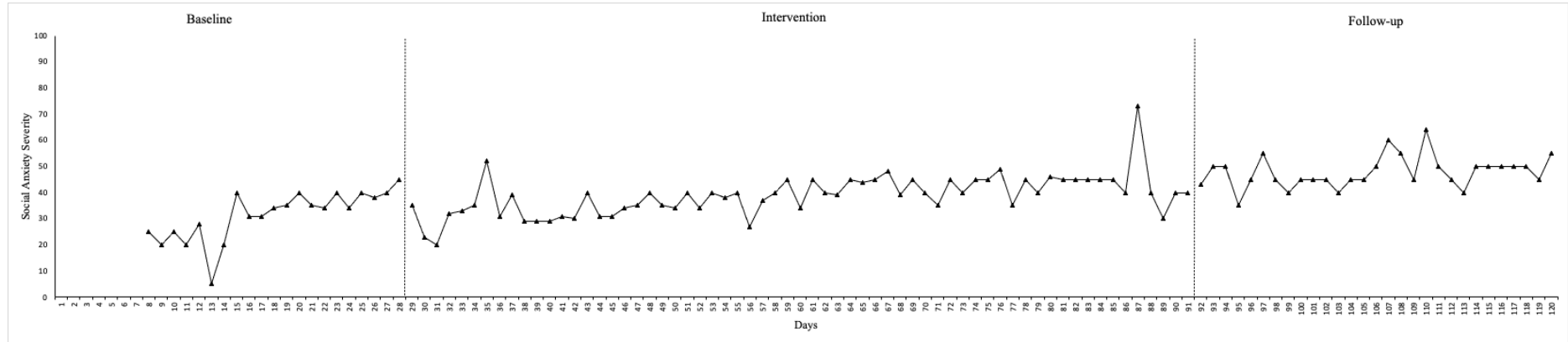MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Participant 2

Participant 3

Participant 4

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Session outline - Mindfulness-Based Cognitive Therapy (MBCT) for social anxiety in alopecia (adapted version of Segal et al, 2013)

Below is an outline of the nine MBCT sessions used in our study. Each session lasted approximately 2 hours and 30 minutes. Timings below are estimates and break times are not included.

Session 1

Awareness and automatic pilot

Theme: This session aims to describe automatic pilot and how this affects us using a raisin exercise and meditations.

Agenda

- Introduction to the session and group (5 minutes)

- Establishing ground rules – flipchart discussion (15 minutes)

- Paired discussion – name and two things about your partner that they are happy to share with the group (10 minutes)

- Raisin exercise (10 mins), Feedback on the Raisin exercise (10 mins)

- Body scan (40 minutes)

- Body scan feedback – What did you notice? What was the experience? What was that like? (15 mins)

- Handbook and discussion (5 minutes)

- Set home practice (10 minutes) – 1) 6 x body scan, 2) daily mindfulness of a routine activity

- 3-minute Breathing Space

Session 2

Living in our heads

Theme: Explores mind wandering and introduces participants to paying attention to what is really happening.

Agenda

- Introduction of social anxiety model (Clark & Wells, 1995)

- Discussion of how self-focused attention maintains social anxiety and how becoming aware using mindfulness fits into this. Short role play (facilitators) of social situation where an individual is socially anxious

Agenda

- Body scan practice (40 minutes)

- Feedback on the body scan (15 minutes)

- Homework review (15 minutes)

- Include some guidance as to what this is about, as well as reflections on the experience overall. Direct focus on the experience of being present, coming back repeatedly

- Thoughts and feelings exercise ('Walking down the street')

- Pleasant events calendar (10 minutes)

- Set home practice (10 minutes) – 1) 6 x body scan, 2) daily mindfulness of a routine activity, 3) complete pleasant experiences calendar daily, 4) 10 minutes of mindfulness breathing for 6/7 days.

Session 3 – Mindfulness of the Breath

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Gathering the scattered mind

Theme: The session looks at how we search for solutions to problems about how we feel the way we do creating a pressure to change the problem. How struggling to change the problem can lead to rumination and further distress.

Agenda

- Five minutes seeing or hearing exercise (10 minutes)

- Practice of being with noticing sounds and sights without labelling or naming

- Mindful movement (40 minutes)

- Feedback on mindful movement practice (15 minutes)

- Homework feedback (15 minutes)

- 3- minute breathing space and review (10 minutes)

- Sitting practice (10 minutes)

- Set home practice (10 minutes) – 1) 3 x stretch and breath meditation 2) 3 x mindful movement meditation, 3) 3-minute breathing space daily, 4) Complete unpleasant experiences calendar daily.

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

Session 4 – Staying Present

Recognising aversion

Theme: Mindfulness offers a way of staying present by giving another place from which to view things; to help take a wider perspective and relate differently to experience.

Agenda

- Five minute seeing or hearing exercise (5 minutes)

- Sitting meditation – awareness of breath, body, sound, thoughts (40 minutes)

- Practice review (15 minutes)

- Homework review (15 minutes)

- Discuss thoughts people have in social situations (20 minutes)

- Mindful walking (10 minutes)

- Wild geese poem (2 minutes)

- Set home practice (10 minutes) – 1) guided sitting meditation for 6/7 days, 2) 3-minute breathing space 3x per day

Session 5

Allowing / Letting Be

Theme: Relating differently involves bringing to experience a sense of 'allowing' it to be, just as it is, without judging it or trying to make it different. Such an attitude of acceptance is a major part of taking care of one-self and seeing more clearly what, if anything, needs to change.

Agenda

- 30 to 40 minute sitting meditation – awareness of breath and body; noticing how we relate to our experiences through the reactions we have to whatever thoughts, feelings or bodily sensations arise; introducing a difficulty within the practice and noting its effects on the body and reactions to it. (40 minutes)

- Practice review (15 minutes)

- Homework review (15 minutes)

- Exercise – embodying the approach to difficult material (10 minutes)

- Breathing space and review (10 minutes)

- Read Rumi's poem 'The Guest House' (5 minutes)

- Using the breathing space for coping - discussion (10 minutes)

- Set home practice (10 minutes) – 1) 3 x working with difficulty meditation, 2) 3 x sitting with silence meditation, 3) 3-minute breathing space 3x daily

Session 6

Thoughts are not Facts

Theme: Negative moods, and the thoughts that accompany them, restrict our ability to relate differently to experience. It is liberating to realise that our thoughts are merely thoughts, even the ones that say they are not.

Agenda

- 30- to 40-minute sitting meditation – awareness of breath and body; noticing how we relate to our experiences through the reactions to whatever thoughts, feelings or bodily sensations arise. introducing a difficulty within the practice and noting its effects on the body and reactions to it. (40 minutes)

- Practice review (15 minutes)

- Homework review (15 minutes)

- Mention preparation for the end of the course

- Reintroduce social anxiety model. Moods, thoughts and alternative viewpoints (20 minutes)

- Breathing space and review (10 minutes)

- Set home practice (10 minutes) – 1) 40 minutes per day of any meditation, 2) 3-minute breathing space 3 x daily, 3) complete the triggers to social anxiety record form

Session 7

Taking care of yourself

Theme: There are some specific things that can be done when social anxiety threatens. Taking a breathing space will come first and then deciding what action, if any, to take. Each person has his or her own unique warning signs of relapse, but participants can help each other in making plans for how best to respond to the signs.

Agenda

- 40 minute sitting meditation – awareness of breath and body, noticing how we relate to our experiences through the reactions we have to whatever thoughts, feelings, or bodily sensations arsie. Introducing a difficulty to the practice and noting its effects on the body. (40 minutes) (Annie)

- Practice Review (15 minutes)

- Homework Review – Including Breathing Space as an Action Step and preparation for end of Group (15 minutes)

- Links between activity and mood. Consider the previous day and list all activities on diary sheets individually. Then identify nourishing and draining activities. These may not necessarily be associated with pleasure, but give satisfaction and a sense of achievement.

- Plan how to best schedule identified nourishing activities, and to respond to draining activities, including using the 3-minute Breathing Space as gathering and focusing (15 minutes)

- Early warning signs and action steps. Paired discussion followed by feedback onto flip-chart. Identifying actions to deal with the threat of relapse or recurrence (15 minutes)

- 3-minute Breathing Space (5 minutes)

- Set home practice (10 minutes) – 1) Any meditation practice daily, 2) complete action plan to prepare for times when anxiety threatens to overwhelm you, 3) 3-minute breathing space 3x daily

Session 8

Maintaining and extending new learning

Theme: How can we take care of ourselves and maintain wellbeing.

Agenda

- Body scan practice (40 minutes)

- Practice review (15 minutes)

- Homework Review – Early warning signs and Action Steps, including Breathing Space as an Action Step (15 minutes)

- Review of the whole course: what has been learnt – with prompt questions on flip-chart (10 minutes)

- Discuss how to keep up momentum and discipline developed over the past 7 weeks in both formal and informal practice.

Session 9

MINDFULNESS FOR SOCIAL ANXIETY IN ALOPECIA

<u>Follow-up session</u>

- Update on how previous four weeks practising alone has gone.

- Group discussion of barriers and challenges to practising mindfulness.

- Group discussion of positives of practising mindfulness.