Cost and Outcome of BehaviouRal Activation:

A Randomised Controlled Trial of Behavioural Activation versus Cognitive Behaviour Therapy for Depression

BEHAVIOURAL ACTIVATION CLINICAL PRACTICE MANUAL

Manual Structure

This manual contains all the necessary information you will need in order to initiate and undertake Behavioural Activation (BA) treatment programmes with patients in the COBRA trial.

Section 1 has some information about the COBRA trial itself. Section 2 outlines some general principles of session timing, duration, frequency and safety. Sections 3 and 4 describe the two treatments being tested in the COBRA trial – BA and Cognitive Behavioural Therapy (CBT) in very broad terms.

Sections 5 and 6 will give you a very good summary of what a course of BA treatment in the COBRA will look like, describing the phasic nature of the COBRA protocol and a summary of the content of each phase. Section 6, in particular, gives a schematic overview of a COBRA BA treatment programme.

Section 7 then goes on to describe the core BA techniques – self-monitoring, functional analysis and activity scheduling. It also briefly describes some of the Phase II modular specific techniques you will be using.

Section 8 then goes on to detail the structure of clinical sessions at all stages of a BA treatment programme. You should follow these structures very closely as your adherence to the overall structure, sessional structure and specific therapeutic content will be critical in ensuring fidelity to the clinical protocol COBRA is testing.

Section 9 consists of a series of helpful 'therapist notes' on each of the principle techniques you will be asked to employ. Think of these as aide memoires. They will help you refresh your memory when it comes to employing these techniques.

Section 10 lists some of the key scientific references underpinning the COBRA trial. This is followed by Appendices A-L, consisting of the therapeutic tools such as diaries you will need to use throughout any treatment programme.

Please consult this manual frequently. Bring it with you to supervision and use it to help you become confident and competent at delivering the COBRA BA clinical protocol. If you would like to personalise it, please do, and if you have any suggestions for additional materials, the trial team will be happy to listen.

Introductory Pages

1. Introduction to the COBRA trial

Clinical depression is one of the most common and debilitating of the psychiatric disorders. It accounts for the greatest burden of disease among all mental health problems, and is expected to become the second-highest amongst all general health problems by 2020.

COBRA is a Randomised Controlled Clinical Trial of two psychological interventions – Behavioural Activation (BA) and Cognitive Behaviour Therapy (CBT) – to establish if there are important clinical and cost differences between them. In detail, the COBRA programme of research seeks to answer two interlinked questions:

1. What is the clinical effectiveness of BA compared to CBT for depressed adults in terms of depression treatment response measured by the PHQ9 at 12 and 18 months?
2. What is the cost-effectiveness of BA compared to CBT at 18 months?

In addition, we will undertake a secondary process evaluation to investigate the moderating, mediating and procedural factors in BA and CBT which influence outcome.

BA and CBT are both active psychological treatments which have previously demonstrated positive effects for people with depression, and are recommended by NICE guidelines for the treatment of depression. Half the participants in the COBRA trial will receive BA and half CBT, allocated on a random basis.

Participants will be assessed for eligibility by a COBRA researcher using a structured clinical interview. If eligible, they will be asked to complete a number of questionnaires with the researcher. They will then be randomly allocated to one of the treatments by the Peninsula Clinical Trials Unit in Plymouth using a process concealed from the research team ensure the team are blind to allocation. Participants will also be seen again for follow-up appointments with a researcher at six months, 12 months and finally at 18 months to complete a number of questionnaires. The research study will last for four years, but each participant's involvement in the study will be for eighteen months.

The study will be taking place in three sites; Devon Durham and Leeds with the lead centre being the University of Exeter's Mood Disorders Centre. COBRA will begin in March 2012, the first participant will start treatment in September 2012 and the study will end in April 2016. Participants will be recruited from August 2012 until April 2014.

The trial is funded by a UK National Institute for Health Research (NIHR) Health Technology Assessment Programme Clinical Evaluation and Trials grant.

2. General clinical procedures

a. Frequency and duration of appointments

Participants will receive a maximum of 20 sessions over 16 weeks with the option of four additional booster sessions.

Sessions will be face to face, of one-hour duration maximum.

Therapists and participants have the option of having sessions up to twice weekly over the first two months of the trial and weekly thereafter.

The final few sessions may be spaced out further if clinically appropriate.

b. Risk assessment and management

Risk will be assessed at every appointment. At the first appointment a full risk assessment will include enquiry on suicide, self-harm, neglect of self, neglect of others, harm to others and harm from others. Risk will be assessed in terms of thoughts, plans, actions taken in support of any plans, and preventative factors. At subsequent appointments risk will be reviewed against the assessment conducted in the first appointment to assess any change in the patient's risk status.

Where any factors are detected which leads the therapist or mental health worker to believe that there is a danger that the patient will harm themselves or others through action or neglect, a risk management plan will be initiated. This plan will follow the principles of the Mood Disorders Centre's policy on risk and any specific actions taken will be determined by the specific policies in place at the NHS clinical provider site. All risks identified and any actions taken will be documented and discussed in supervision and with the COBRA trial manager, site lead and chief investigator.

c. Collecting routine outcome measures

Over recent years, it has become standard practice for therapists and mental health workers to ask patients to complete short clinical outcome scales at every clinical encounter. Measures are used to assist both parties track progress, identify setbacks and provide data for individual patient progress and overall service evaluation. In COBRA, we use the same procedure at every session. Measures are collected from the patient during the early part of the appointment and discussed briefly before moving onto the main session content. Occasionally measures may lead to a change in the session agenda. Measures are always discussed in supervision.

3. What is Behavioural Activation?

Behavioural Activation (BA) is a psychological treatment alleviating depression by focusing directly on changing behaviour based on behavioural theory. This theory states that depression is maintained by avoidance of normal activities. As people withdraw and disrupt their basic routines, they become isolated from positive reinforcement opportunities in their environment. They then end up stuck in a cycle of depressed mood, decreased activity and avoidance. BA systematically disrupts this cycle, initiating action in the presence of negative mood, when people's natural tendency is to withdraw or avoid. BA targets avoidance from a contextual, functional approach not found in CBT – i.e., BA focuses on understanding the function of behaviour and replacing it accordingly. BA also explicitly prioritises the treatment of negatively reinforced avoidance and rumination.

The overall goal of BA is to re-engage participants with stable and diverse sources of positive reinforcement from their environment and to develop depression management strategies for future use. BA sessions consist of a structured programme increasing contact with potentially antidepressant environmental reinforcers through scheduling and reducing the frequency of negatively reinforced avoidant behaviours. Treatment is based on a shared formulation drawn from the behavioural model in the early stages of treatment, thereafter developed with the patient throughout their sessions. Specific BA techniques include the use of a functional analytical approach to develop a shared understanding with patients of behaviours that interfere with meaningful, goal-oriented behaviours and include self-monitoring, identifying 'depressed behaviours', developing alternative goal orientated behaviours and scheduling. In addition the role of avoidance and rumination will be addressed through functional analysis and alternative response development.

4. What is Cognitive Behavioural Therapy?

The overall goal of CBT is to alter the symptomatic expression of depression and reduce risk for subsequent episodes by correcting the negative beliefs, maladaptive information processing and behavioural patterns presumed to underlie the depression Sessions consist of a structured, partially didactic programme. Treatment begins with patients learning the model, behavioural change techniques, and moves on to to identifying and modidfying negative automatic thoughts, maladaptive beliefs and underlying core beliefs. In later sessions, learning is translated to anticipating and practicing the management of stressors that could provoke relapse in the future. Specific CBT techniques include scheduling activity and mastery behaviours, the use of thought records and modifying maladaptive beliefs. The behavioural elements in CBT focus on increasing activity together with practical behavioural experiments to test specific cognitive beliefs. CBT does not take the contextual, functional approach of BA, nor does CBT explicitly prioritise the targeting of avoidance and rumination.

5. General clinical principles of the protocol

a. Phase I

Phase I represents the introduction and application of the core BA methods. The first session is an assessment where the worker gathers information on the patient's presenting problem and describes the BA model. Phase I then moves on to undertake the core activities associated with successful BA – establishing the link between mood and behaviour, developing functional analysis, linking this to the patient-specific BA formulation, and setting and reviewing activity scheduling exercises. The phase ends with several sessions using the TRAP/TRAC method for introducing alternative behaviours.

b. Phase II

Phase II consists of a series of mandatory and optional therapeutic 'modules' which are undertaken as a tailored response to the patent's presenting problems. The TRAP/TRAC method is used to anchor modular activities throughout, but specific activities are also undertaken dependent on the module being applied. Mandatory modules are on rumination and problem solving. Optional modules include sessions on functional equivalence incorporating values, anxiety, punishment, communication and alcohol/substance use.

c. Phase III

Phase III is focussed on planning to maintain progress and reduce relapse potential. In this phase worker and patient acknowledge the necessity to manage the forthcoming ending of therapy and move on to self-planning without clinical assistance, identifying signposts for action (relapse triggers), reviewing progress on goals and valued activities so far, identifying action to meet remaining goals and valued activities, and identifying help-seeking triggers and action to be taken. The TRAP and TRAC method is used to plan further activity using specific modular techniques for increasing access to mood enhancing activities and reducing or replacing avoided behaviours.

d. Booster phase

These appointments are optional with a very flexible content. Worker and patient undertake a review of difficulties experienced and identify specific therapeutic techniques from the core Phase I stage or any modules in Phase II which may need refreshing, practice or further work. Relapse prevention activities may also be undertaken.

e. Transition and review appointments

These sessions are an opportunity for worker and patient to review progress, reflect on activities undertaken so far and move to the next Phase. The formulation is revisited, progress against goals and valued activities is checked, the therapeutic rationale is repeated, remaining activities are identified and a plan is developed for the next phase

6. Behavioural Activation Protocol Overall Session Chart

<table>
<tr><td colspan="6">PHASE I</td><td>TRANSITION</td><td colspan="8">PHASE II</td><td>TRANSITION</td><td colspan="4">PHASE III</td><td colspan="4">BOOSTER</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr>
<tr><td colspan="2">Assessment/rationale Formulation diagram</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>Goal setting and introduction of valued activities</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="16">Self-monitoring leading to activity scheduling</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td colspan="14">Avoidance-Functional analysis/TRAP and TRAC; developing formulation-diagram</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>Review A
What have learnt/target and hierarchy for next phase of valued activities</td><td></td><td></td><td></td><td>Mini progress review by now</td><td></td><td></td><td></td><td>Review B
What have learnt/target and hierarchy for next phase of valued activities</td><td></td><td></td><td></td><td>Review
What have learnt/target and hierarchy for next phase of valued activities</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td colspan="14">Carry on Activating (up your hierarchy….) including grading and stress testing</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td colspan="14"><u>Additional module choices guided by functional analysis (mandatory/optional)</u>
Rumination;
Problem solving;
Functional equivalence (including values);
Anxiety;
Punishment;
Communication;
Alcohol and Substance Use</td><td></td><td></td><td></td><td></td></tr>
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Maintaining Progress</td><td></td><td></td><td></td><td></td></tr>
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Summary of Core Behavioural Activation Techniques

7. Summary of core behavioural activation techniques

a. Self-monitoring

Self-monitoring is the recording of activities and emotions by patients. It is used to inform the content and direction of almost all other clinical techniques in BA. Self-monitoring is one of the core building blocks upon which the whole BA treatment approach stands.

Self-monitoring records provide an initial baseline against which change can be monitored during the course of treatment. The records then allow patient and therapist to monitor the progress of treatment and identify specific treatment targets. Records include details of activities engaged in and emotions experienced. Patients complete records frequently, at least daily and often hourly, mostly as 'homework'. However, some patients can complete self-monitoring records during one-to-one treatment sessions, particularly in the early stages of treatment or when specific details are missing from homework records.

Patients and therapists should always pay close attention to records. They can identify connections between behaviours and feelings, the overall pattern of feelings and activities, disruptions to routine, and patterns of avoidance. Gathering this information helps patients and therapists identify areas for change including the potential to increase positively reinforced activities and reduce negatively reinforced avoidance behaviours.

Self-monitoring leads on to the other core techniques of activity scheduling and functional analysis covered in the next sections.

b. Functional analysis

Functional analysis is the study of an individual patient's pattern of behaviour and its variability. It is used to determine the contexts under which desired and undesired behaviours occur. The results of functional analysis guide interventions to systematically and therapeutically increase or reduce target behaviours.

Functional analysis is a core behavioural approach to understand why certain behaviours occur more frequently and why others less so. A functional analysis will include information on 'antecedents', 'behaviours' and 'consequences'. Antecedents are often known as 'triggers'. In depression many environmental, personal or social triggers can act as cues for behaviours such as avoidance with the consequence that a person disengages with the world leading to increased depression. Therapists use functional analysis in BA to unpick this general pattern and understand its personal manifestation for individual patients.

We use two acronyms in BA to illustrate the process of functional analysis:

- ABC: Antecedents ⇒ Behaviour ⇒ Consequences
- TRAP: Triggers, Response, *Avoidance Pattern* – where 'Response' refers to the emotional feelings experienced when the trigger occurs.

Therapists and patients use functional analysis to find out detail about the conditions under which the trigger, target behaviour and consequence occur and under what conditions do they do not occur by asking questions about when, where and with who. Therapists also help patients understand the function of behaviour, particularly how patients respond to triggers and how their response might be maintaining negative feelings.

Another acronym – TRAC: Triggers, Response, *Alternative Coping* – is used to help patients plan alternative behavioural responses to the trigger and emotional response. These might include recognising TRAPs, exerting environmental control by disrupting the trigger cues, and developing alternative responses through planning a TRAC. The method BA therapists use to help patients do this is to develop a formal a 'contingency plan'. This is a strategy for the patient to use when the trigger, or the threat of the trigger, occurs. This is often known as an: 'if-then' plan. These contingency plans are developed in response to triggers that act as warning signs, together with the personalised functional analysis.

c. Activity scheduling

Activity scheduling is the final core component of the three-legged stool that makes up BA. Self-monitoring provides knowledge of the patient's individual behavioural context. Functional analysis provides information on the triggers and reinforcers for these behaviours. Activity scheduling is the reshaping of the patient's behaviour towards behaviours that are less depressogenic.

Activity scheduling is all about planning. We encourage the patient to plan activities in a purposeful way. Activities are selected that have a clear focus and are drawn from the insights of the functional analysis. Planned activities may include new 'functionally equivalent' behaviours to replace activities that are no longer possible in a person's changed life. Activities may be a return to old behaviours that have been dropped or avoided. Activity schedules may be explicitly about reducing current behaviours that are actually depressogenic. Some scheduled activities may be used to disrupt depressed thinking or behaviours in the face of known danger signs and triggers.

The main message to give about activity scheduling is that it runs throughout the whole course of a BA programme. We do not rely on new, positively reinforcing behaviours appearing by chance. We plan them into a person's life. Planned behaviours all have a clear rationale, are best if they represent the implementation of a person's value set, and are often designed in an experimental way. Patient's act as scientists in their own personal laboratory, investigating the impact of reducing negatively reinforced avoidance and increasing positively reinforced behaviour. What we expect is that if we understand the triggers and contingencies, once we schedule in the behaviours the reinforcement effects will take over and help shape the person's behaviours in a more positive direction.

Alongside self-monitoring record forms, activity scheduling records will be the most frequently used and discussed tools in the behavioural activationists armoury.

d. Introduction to Phase II modular techniques

Rumination
This module describes how the BA approach, and in particular, functional analysis, is used to treat rumination. Rumination is a covert mental process common in depression that can be approached therapeutically as behaviour, using antecedent, behaviour and consequence ideas to understand the function of rumination and identify alternative responses. Techniques for helping reduce rumination include disrupting cues, finding alternative responses when cues appear, and developing concrete thinking.

Problem solving
Although BA is underpinned by an overall problem-solving stance throughout treatment, therapists can also use problem solving as a discrete clinical technique. Problem solving is a step-wise programme of problem definition in concrete, behavioural terms, identification of potential solutions, implementation of at least one solution and evaluation of the results. Problems may be primary or secondary and avoidant coping or skills deficits may prevent the resolution of problems.

Functional equivalence
A functionally equivalent behaviour is one that 'does the job' of the original behaviour. Therapists help patients identify and substitute functionally equivalent behaviours throughout BA work, particularly when a patient is engaging in a behaviour that works well for them in some ways, but has some significant negative consequences, and when a patient would like to do more positively reinforced activities but cannot undertake some of the behaviours that s/he engaged in previously. This module describes the technique of functional equivalence in more detail and the selection of alternative, value-based, activities that patients find appealing, particularly in situations where they cannot undertake behaviours they previously engaged in.

Anxiety
Most patients with depression also experience significant symptoms of anxiety. As patients engage with their environment, anxiety is likely to be a problem that will require attention at some point. Although the goal of BA is to treat depression, using the same functional analytical approach can help with anxiety also. Therapists undertake functional analysis using TRAP and TRAC sheets to do this. We gather information about anxiety and apply the TRAP technique to consider its maintenance and the short and long-term consequence of associated avoidance. From here therapists and patients use TRAC to explore alternative behaviours that will help the patient undertake more activity. This in turn gives the patient positive reinforcement and encourages future 'outside in' behaviour to overcome anxiety.

Punishment
BA typically involves reintroducing behaviours that used to be reinforced when the person was not depressed or finding alternative behaviours that may serve the same function for a person. One difficulty that occurs in treatment is that sometimes when a person tries to reintroduce a behaviour that s/he once found easy or enjoyable, now the same activity is experienced as very difficult and unrewarding. These types of clinical situation can be understood in behavioural terms in that a behaviour that in

one context was rewarded is now in another context punished. As with any behaviour that is punished, the activity will reduce in frequency. This module provides some guidance on how to deal with this type of situation.

Communication
Interpersonal concerns, specifically communication difficulties, underlie many behavioural activation problems. Sometimes they are a TRAP/TRAC in their own right, at other times communication difficulties can be a barrier to achieving behavioural TRACs. This module focuses on finding communication strategies that work for individual patients in their own contexts, rather than teach overall interpersonal behaviours such as assertiveness. Communication TRACs are patient led –therapist work with patients so that they generate their own communication strategies and solutions.

Alcohol & substance use

Session Guides

8. Session guides

The following pages detail the structures of individual sessions to be conducted as part of the COBRA trial. There are separate pages for: assessment early, mid and late Phase 1 appointments; the transition and review appointment between phase 1 and II; phase II appointments; the transition and review appointment between phase II and the relapse prevention phase; the relapse prevention phase appointments; and the booster sessions.

These session guides should be followed closely. They are the essential structure to the COBRA BA protocol. Individual sessions have different session specific content, the details of which are described in the 'therapist notes' section of this handbook. Please use the technique specific instructions to tailor sessions but start and finish sessions according to the session guides in the following pages.

1. Introductions and orientation

2. Information gathering
   a. Main problem identification
   b. Autonomic, Behavioural and Cognitive symptoms
   c. Functional analysis including Triggers and Impact
   d. Risk assessment
   e. Sessional measures and feedback
   f. Past history, previous treatments and response, other current treatments, alcohol and drug use, co-morbidities

3. Information giving
   a. BA rationale
   b. Treatment session, duration and content details, role of worker

4. Shared decision making
   a. Diary introduction
   b. First steps

5. Summarise and check out collaborative understanding of session

6. Agree new activities

7. Appointment planning

8. Ending

Clinical tools associated with this session:
BA Assessment Worksheet (Appendix A)
Self-Monitoring Record Form (Appendix D)

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record forms

5. Session specific therapeutic content
    a. Review BA rationale
        i. Introduce simple functional analysis: mood/behaviour link
        ii. Link to formulation diagram
    b. In session functional analysis ABC exercise
    c. Instruction on use of functional analysis ABC sheet between sessions remembering recency and recollection principle of completing sheets based on self-monitoring record
    d. Discuss and record goals

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with these sessions:
Formulation Diagram (Appendix B)
Functional Analysis ABC Sheet (Appendix C)
Self-Monitoring Record Form (Appendix D)
Goals Sheet (Appendix E)
Valued Activities Worksheet (Appendix F)

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record form

5. Session specific therapeutic content
    a. Review use of functional analysis ABC sheets on self-monitoring record
    b. Introduce principle of activity scheduling for increasing access to mood enhancing activities
    c. Introduce and complete an example activity planning tool
    d. Discuss goals in relation to activity scheduling

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with these sessions:
Functional Analysis ABC Sheet (Appendix C)
Self-Monitoring Record Form (Appendix D)
Goals Sheet (Appendix E)
Activity Planning Tool (Appendix G)

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record forms

5. Session specific therapeutic content
    a. Review use of functional analysis ABC sheets on self-monitoring record
    b. Review use of activity planning tool
    c. Introduce TRAP/TRAC using example of negatively reinforced avoidance from self-monitoring record form
    d. Undertake further activity planning for increasing access to mood enhancing activities and TRAP to TRAC for avoided behaviours

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with these sessions:
Functional Analysis ABC Sheet (Appendix C)
Self-Monitoring Record Form (Appendix D)
Activity Planning Tool (Appendix G)
TRAP & TRAC Worksheet (Appendix H)

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record forms

5. Session specific therapeutic content
    a. Revisit formulation
    b. Check progress against goals and valued activities
    c. Repeat rationales
    d. Identify remaining activities
    e. Develop overall plan for next phase

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with this session:
Formulation Diagram (Appendix B)
Self-Monitoring Record Form (Appendix D)
Goals Sheet (Appendix E)
Valued Activities Worksheet (Appendix F)
Activity Planning Tool (Appendix G)

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record forms

5. Session specific therapeutic content
    a. Review use of TRAP/TRAC and activity planning tools
    b. Introduce rationale for additional module
        i. Identification of specific issue to be addressed
        ii. Identification of personal examples of specific issue
        iii. Information giving about specific issue and module techniques
    c. Apply functional analysis
    d. Undertake specific modular exercises in session
    e. Plan further activity using specific modular techniques within functional analysis and TRAP to TRAC frameworks alongside continued activity planning for increasing access to mood enhancing activities and TRAP to TRAC for avoided behaviours

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with these sessions:
Functional Analysis ABC Sheet (Appendix C)
Self-Monitoring Record Form (Appendix D)
Activity Planning Tool (Appendix G)
TRAP & TRAC Worksheet (Appendix H)
And any additional clinical tools associated with chosen modules, e.g. Rumination Monitoring Form (Appendix I), Problem Solving Worksheet (Appendix J) or Anxiety Cycle Template (Appendix K).

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record forms

5. Session specific therapeutic content
    a. Revisit formulation
    b. Check progress against goals and valued activities
    c. Repeat rationales
    d. Identify remaining activities
    e. Develop overall plan for next phase

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with this session:
Self-Monitoring Record Form (Appendix D)
Goals Sheet (Appendix E)
Valued Activities Worksheet (Appendix F)

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record forms

5. Session specific therapeutic content
    a. Introduce concept of maintaining progress and/or reducing relapse potential
    b. Acknowledge necessity to manage forthcoming therapeutic ending
    c. Consider following topics:
        i. Moving to self-planning without clinical assistance
        ii. Identifying signpost for action (relapse triggers)
        iii. Review goal and valued activities progress so far
        iv. Identify action to meet remaining goals and valued activities
        v. Identify help-seeking triggers and action to be taken
    d. Plan further activity using specific modular techniques within functional analysis and TRAP to TRAC frameworks alongside continued activity planning for increasing access to mood enhancing activities and TRAP to TRAC for avoided behaviours

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with these sessions:
Functional Analysis ABC Sheet (Appendix C)
Self-Monitoring Record Form (Appendix D)
Goals Sheet (Appendix E)
Valued Activities Worksheet (Appendix F)
Activity Planning Tool (Appendix G)
TRAP & TRAC Worksheet (Appendix H)
Relapse Prevention Worksheet (Appendix L)

1. Setting the session agenda
2. Sessional measures
3. Risk review
4. Review of self-monitoring record forms

5. Session specific therapeutic content
    a. review of difficulties experienced
    b. identification of specific core or modular therapeutic techniques to revisit
    c. relapse prevention activities

6. Summarise and check out collaborative understanding of session
7. Agree new activities
8. Manage any other business from agenda
9. End by agreeing next appointment time and place

Clinical tools associated with these sessions:
Self-Monitoring Record Form (Appendix D)
Relapse Prevention Worksheet (Appendix L)
And any additional clinical tools associated with revisited modules.

9. Therapist notes detailing core and Phase II modular techniques

Core Technique:

a. Self-Monitoring

a. Self-Monitoring

Introduction and general description of the module/technique

Self-monitoring is the recording of activities and emotions by patients during the hours, days and weeks of treatment. Recording is usually done repeatedly during the day, using a specifically designed record sheet.

Self-monitoring is so core to BA, it is initiated early on in the course of therapy and provides information throughout. Martell and colleagues (2001) identify the following eight key functions of self-monitoring, although this list is not exclusive:

- Assess the patient's overall level of activity
- Provide information on the connections between mood and activity
- Assess the range of emotions the patient experiences
- Give information as to which activities are associated with feelings of mastery or pleasure
- Assess the range of activities engaged in by the patient
- Guide the selection of activities to increase, based upon their effects upon mood
- Identify and monitor avoidance behaviours
- Evaluate progress towards valued goals

The module/technique in detail

Step 1: The rationale for self-monitoring

Self-monitoring begins with the careful provision of a rationale. Here is an example:

"*In this therapy we are going to be looking at how changing what you do can change the way you feel. But in order to know which changes might be helpful ones, it is important that we know how the different things you do are linked to how you feel. I could just ask you, but it can be difficult to remember all of the different things we do every hour of every day, and exactly how we felt when we did them. So this might not give us the information we are looking for. Therefore, I am going to invite you to keep a record of what you do each day, and how you feel."*

It can be helpful to compare changing patterns of behaviour to breaking a habit. For example,

"*Doing BA can be a bit like trying to break a set of habits: you are trying to learn to do certain things differently to get a better outcome. The first step in changing a habit*

is noticing that you are doing it. Keeping a record of your activities and how you feel will help you with this."

Patients can be invited to think about times they have tried to break a habit, in particular the need to be aware of what the negative consequences of the habit were, and the need to be aware of when the habitual behaviour was happening.

Step 2: Introducing self-monitoring in detail

Self-monitoring involves the use of a record form (see Appendix D) in which patients write down activity, mood and intensity, even on an hourly basis. In terms of the approach that patients should be encouraged to take, Martell and colleagues (2010, p.70) suggest that patients should be encouraged to "*act like scientists, examining their lives in detail, and to closely examine and record even the small things that they might otherwise think are unimportant*".

Recording Activity

Therapists should encourage patients to be relatively detailed when recording activity. The prompt questions "Who? What? Where?" can be used to facilitate this. For example rather than writing "*TV*" it can be more helpful to write "*watching TV in my room alone*". Therapists should include the idea that rumination is an activity to be recorded, and encourage patients to note down periods of rumination as part of their self-monitoring.

Recording Mood

Patients should identify and label the emotions they experience in connection with each activity, and rate these according to how intense they are, for example on a scale of 0-10. Initially it can feel more manageable for some patients to begin by rating merely how positive or negative they felt (from -10 = very negative to +10 = very positive), rather than identifying discrete emotions.

Frequency

Patients should complete the self-monitoring records as frequently as possible, ideally on an hourly basis. If this is not acceptable to patient or manageable, the frequency of rating can be broken down in several ways:

- Records can be physically filled in at less frequent points throughout the day. For example a patient might fill in their record at lunchtime for the hours of 8am to 1pm, at teatime for the hours from 1pm to 5pm, and just before bed for the hours from 5pm to 10pm.

- Patients can complete records for set periods of the week only, for example hourly Monday 9-12, Tuesday 12-3, Wednesday 5-10, and so on. These periods should span different times of day and likely patterns of activity.

- The patient can be invited to record less frequently throughout the week but to have a couple of set days when s/he records hourly.

It is important that the added value of frequent recording is emphasised. This can be demonstrated when the patient completes a practice record in session (see below). S/he can be asked to contrast the ease of completion and richness of information when the previous hour is recorded, compared to the previous day.

When planning frequency of record completion it is important to establish a specific plan for putting self-monitoring into action. Therapists need to agree with patients exactly records will be completed, how the patient will remember to do so, what practical steps does s/he will take to make self-monitoring happen, for example by putting a copy of the record in a bag taken to work.

In-Session Practice

Completing a self-monitoring record in session can be an extremely valuable exercise to identify potential misunderstandings or challenges in completion. It provides the patient with an initial positive experience of this new challenge, and helps them to understand exactly what is involved in the task. In-session exercises can include recording the day so far or the previous couple of days.

Homework

Self-monitoring is principally a between-session homework task. In addition to negotiating goals around frequency of completion, therapists should ask patients to identify any possible barriers to completion and these can be problem solved. Below we identify potential solutions to record completion challenges faced by patients.

Step 3: Reviewing self-monitoring records

Therapists and patients should review all self-monitoring records from the previous week together. In general the therapist is interested in what was learned from completing the record. There are some specific exercises that can be undertaken when reviewing the record. Martell and colleagues (2010) identify five questions that can guide therapists in exploring the record with the patient:

1. What connections are there between activity and mood?

From the patient's record it may be possible to identify both activities that are associated with better mood, and activities associated with worse mood. In some cases, the same activity will be associated with different mood states, reflecting differences in the context or in supplemental behaviours engaged in by the patient on each occasion. Particular exercises might involve: i) asking the patient to spot any changes in mood state, and then to explore the activities that occurred before, during and after this change; ii) asking the patient about whether they notice any patterns in the relationship between what they did and how they felt; iii) asking the patient whether there are any activities they notice that are missing from their records which in the past would have had a strong effect on mood, particularly positive '*anti-depressant*' activities.

2. What is the overall pattern of mood and emotion over the week?

Some patients will report a wide range of feelings, and intensities of feeling, across the week whilst others will report having limited emotional variation. In the latter case, therapists can explore this further with patients. This may lead to exploration of the range of potential – but absent – emotions and their features, as described in the previous section.

3. What is the patient's routine like and have there been any disruptions to this?

Often when people are depressed their routine can be affected. Conversely, disruptions to routine can often promote depression. Variations in daily routines can contribute to some physical symptoms of depression such as tiredness and appetite disturbance whereas regular routines can feel containing and comforting (Martell, 2010). Self-monitoring records provide therapists with an opportunity to explore the patient's routine in terms of features such as: sleep-wake times, meal times, and patterns of work and social contact. Therapists can ask patients to consider relationships between these aspects of routine and their mood states.

4. Can any avoidance patterns be identified?

Self-monitoring records can be used to highlight patterns of avoidance. For example, some activities that might be expected in the record might be entirely absent, such as social contact outside of work. In such cases it is important to explore with the patient whether s/he is turning down opportunities for such contact, and whether they are avoiding these opportunities to manage negative emotions that arise when social opportunities are on the horizon. Indeed, instances of increased negative emotions can sometimes indicate the presence of avoidance patterns. Therapists can ask patients to describe what triggered the emotion, what they did in response to the negative feeling and what the consequences of this were. Conversely, an absence of strong negative feelings in someone who reports severe emotional difficulties in their present life may reflect the use of avoidant coping strategies. These may include the drugs or alcohol to numb emotions.

5. Where should the therapist and patient look to initiate change?

Gathering information in the areas outlined above will help the patient and therapist identify areas for change to both increase positively reinforced activities and reduce negatively reinforced avoidance behaviours. This leads on to the other core techniques of functional analysis and activity scheduling covered in subsequent sections.

Often the review will also highlight difficulties encountered by the patient in completing the record. If the patient was not able to meet his / her completion goals with respect to recording the therapist should be alert to the patient having attempted the task, and reinforce the value of this. All information gained is useful, even information as to why the record was not completed.

Issues that can arise when reviewing self-monitoring records:

- *Blocks of time with little detail or variation in terms of mood and activity.* When this happens we explore it further with the patient. It may be that the patient did not use hourly ratings, in which case we can compare this block of time with a period in which hourly ratings were used. We can then encourage more frequent rating. We can also use visualisation to help the patient 'recreate' the block of time, and provide greater details about moods and activities. Finally, we can explore the potential presence of particular mental activities over this period, such as rumination.

- *Difficulty in identifying emotions*. It can be helpful to talk with the patient about the range of possible emotions that can be experienced, including positive or neutral feelings. We can then list these and if necessary we can assist the patient to determine how s/he would know which feeling was present by asking them to identify associated physical sensations, thoughts, behaviours etc.

- *Not completing the record*. Incomplete or absent record keeping is very common, particularly at the beginning of a BA programme. There are three common reasons for incomplete records:

    1. Practical issues, for example, difficulty writing, difficulty remembering to complete the record. We can use problem-solving to overcome these practical barriers, for example by suggesting the use of alternative methods of recording such as an audio recorder or computer.

    2. The patient feels that the benefits of recording do not outweigh the costs. Here, we can explore the patient's beliefs about the costs and benefits of recording and revisit the BA rationale. Patients may identify potential costs such as a fear of making depression worse, fear of 'realising' how little s/he does and how much 'worse' s/he is since becoming depressed. In order to address these ideas, we can try and help the patient with the idea that a first step towards changing depression is to know where you stand with it, using the 'habit metaphor. Next we can encourage the patient to complete a record of the previous day in the session itself. We can also advise the patient to break the recording task down into smaller chunks, for example recording every other day, and then observing the effects of doing so.

        Finally, we can introduce the TRAP pattern by showing how the triggering effect of remembering it is time to complete the record produces an emotional response such as feeling anxious or hopeless, followed by an avoidance pattern of putting the record away without completing. We can explain the consequences of not completing the record, for example it does not solve the problem, it leads to feelings of guilt, and in response we can explore alternative behaviours such as taking a small step towards completion.

    3. The patient believes that s/he has to be in the right frame of mind to complete the record.

        This is an opportunity for us to revisit the 'outside in principle of acting first to change how we feel, even if we do not feel like it. We can reinforce this by inviting the patient to recall times when s/he did something to help themselves despite not feeling like it with the consequent positive effects.

List of therapy materials used in this module and/or with this technique

Self-Monitoring Record Form (Appendix D)

Useful references:

Addis , M.E. & Martell, C.R. (2004). Overcoming depression one step at a time (pp. 23-44).Oakland, CA: New Harbinger Publications.

Martell, C.R., Addis, M.E. & Jacobson, N.S. (2001). *Depression in context: strategies for guided action* (pp.70-88). New York: W.W. Norton.

Martell, C.R., Dimidjian, S. & Herman-Dunn, R. (2010). *Behavioural Activation for depression: A clinician's guide* (pp. 71-75). New York: The Guilford Press.

Moore, R.G. & Garland, A. (2003). Cognitive therapy for chronic and persistent depression (pp. 172-197). Chichester, U.K.: John Wiley & Sons Ltd.

Core Technique:

b. Functional Analysis

b. Functional Analysis

Introduction and general description of the module/technique

Functional analysis is the study of an individual patient's pattern of behaviour and its variability. It is used to determine the contexts under which desired and undesired behaviours occur. The results of functional analysis guide interventions to systematically and therapeutically increase or reduce target behaviours. A functional analysis will include information on 'antecedents', 'behaviours' and 'consequences'.

The module/technique in detail

Step 1: Conduct a functional analysis

We use patients' self-monitoring charts to discuss their patterns of behaviour that are helpful or unhelpful. We do this in order to understand the individual links between behaviours and outcomes, and the *circumstances* under which specific behaviours result in negative or positive outcomes.

We use two acronyms to help the process of functional analysis:

- ABC
- TRAP/TRAC

Although these acronyms are helpful tools, they are not an end in themselves. We merely use the ABC and TRAP/TRAC strategies to help patients understand when behaviour results in specific desired or undesired outcomes.

ABC analysis - Antecedents ⇒ Behaviour ⇒ Consequences

1. examine the patient's self-monitoring record form/discuss recent events
2. look for instances where low mood and behaviour, or a lack of behaviour, are associated
3. alternatively look for when improved mood or performance and a target behaviour are associated
4. examine the record for antecedents or triggers for these instances
5. discuss the consequences of the behaviour or lack of it

TRAP – Triggers, Response, Avoidance Pattern

1. **Triggers** are identical to 'antecedents' and are factors that precipitated a specific kind of response
2. **Response** is an emotional or physical response
3. **Avoidance Pattern** is the behaviour that the individual engaged in

Critical features to consider in the functional analysis

- *What is the context in which the behaviour occurs?* We should consider when, where, how, and with whom behaviours do or do not occur. This will give us clues as to behavioural antecedents and functions, as well as ways to leverage change. For example, if unwanted target behaviours tend to occur in certain places or with certain people, these contextual factors can be examined as triggers. Once we have used the functional analysis to determine what specific element of that place or person is problematic, we then have scope for controlling the environment to reduce the behaviour. For example, if a patient is prone to become bored when sitting at home, plans might be made to make the environment more stimulating. Another example is if being in a hurry or trying to do too much is associated with a stressed response and avoidance, making plans to be more focused and less in a rush may reduce the target behaviour.

- *What is the function of the behaviour?* People engage in most behaviours for good reason. This is quite a normalizing message to give to patients. One way we can look at this with the ABC and TRAP models is to discuss the short and long-term consequences of behaviours. For example, people often engage in avoidance behaviours because they are negatively reinforcing. The more we avoid uncomfortable activities such as talking to someone else about an uncomfortable topic, the more short-term relief we feel and the more likely we will avoid the same activity again. However, there are usually negative long-term consequences of such avoidance in that the problem does not go away and may hang like a black cloud over our head. In a functional analysis it is important to understand the short-term advantages of avoidance as well as the long-term disadvantages.

  Look for patterns of behavioural responses to understand how a patient might habitually respond to particular antecedents. Understanding patterns can help us to design activities that whilst specific to certain contexts are also be generalisable. We can use the antecedents or triggers to help patients identify warning signs for particular habitual patterns of behavioural responses. Identifying such cues to habits enables the patient to consciously act to “nip the habit in the bud”.

- *Obvious and subtle avoidance.* Avoidance can happen in both obvious and subtle ways. Clear-cut examples of avoidance behaviours include lying in bed, calling in sick to work and avoiding paperwork. However, people often avoid in less obvious ways. For example, they can over-engage in behaviours in one domain of their life to the detriment of other important areas, for example staying on at the office late to avoid dealing with difficult situations at home, or spending a lot of time out socialising to avoid having to look for work. Avoidance can also be more subtle or covert such as avoiding eye contact in social situations or ruminating about difficulties. Because avoidance behaviours can become a habit, people may have difficulty identifying their behaviour as avoidance, particularly when it is subtle.

Look for what isn't being done, as much as what is being done. We can discuss 'important', 'routine', 'necessary' and 'pleasurable' activities and the balance between them. If there is considerable imbalance then that may be a clue about specific activity areas that are being avoided.

This series of questions will reveal the triggers and consequences of behaviours and the environments under which they are more or less likely to occur. We can then formulate the potential function of the behaviour and begin to choose interventions for the target behaviour. Critically, with functional analysis, all behaviours are fair game: "everything is grist to the mill". For example, if a patient was to return and report that they did not complete homework, we can perform a functional analysis on times when homework has been done or not to understand what influences completion and then take this into account in future planning.

Step 2: Identify alternative behaviours

Once we have undertaken a functional analysis we can start to identify alternative behaviours in response to the triggers. These alternative behaviours are varied and can include exerting environmental control to disrupt the triggers, or developing alternative responses such as increased approach behaviours. It is here that the TRAP/TRAC acronym really helps. We can help patients to recognise TRAPS and to shift to TRAC – Trigger Response, Alternative Coping – using questions like "*What is the TRAP here?*"; "*So what could get you back on TRAC?*"

Questions for identifying alternative behaviours

1. "*Let's think of all the possible alternative approaches to this, no matter how wild or simple they might seem.*" We can ask the patient to write all of the ideas down, no matter how unlikely a response it seems at first. Later, patients can choose which behaviours might work well and pick the most likely one.

2. "*Have you had similar situations in the past, perhaps when you weren't depressed, when you dealt with this kind of a situation in a way that you felt was more helpful for you? What did you do?*" By obtaining explicit and detailed comparisons of contrasting situations, such as a time when a similar behaviour such as trying to problem solve was helpful, can help us understand alternative behaviours and contextual influences.

3. "*If you knew someone else with a problem like this, what would you recommend they do?*"

Interventions emerging from the functional analysis

1. Altering environmental triggers directly when the functional analysis reveals aspects of the environment that increase the likelihood of unwanted target behaviours including approach, avoidance, and rumination.

2. Replacing behaviours with ones that break the trigger/avoidance pattern or lead to more positive and valued activities. These latter behaviours are covered in more detail in the functional equivalence section of this handbook.

Simple homework exercises set up as behavioural experiments can be tried from as early as session 1 or 2 to influence behaviours by disrupting the antecedent triggers.

Examples might include changing a routine, creating a tidier work-space, focussing on one thing at a time. When designing such alterations of the environment, it is important to determine which aspect of a situation is central to behaviours such as avoidance or rumination. For example, if being by oneself is a trigger for lower mood, this might reflect being alone, feeling lonely, experiencing a lack of encouragement, a sense that activities feel pointless done on their own, and/or a general lack of structure. Further questioning ("thought experiments") can find out what aspect of being alone patients find most difficult and what they really value about being with someone else. We then use this information to inform the environmental change that is likely to be most useful. For example, if a lack of encouragement is the main reason for why being on one's own is problematic, then the contingency plan may examine ways to increase self-encouragement.

We can actually test these ideas 'experimentally' to examine the consequences of changing the patient's environment. For example, we can structure a test where the patient listens to the radio in the morning to move their focus away from feelings of tiredness. If being alone is a trigger, we can test the effect of increased social contact. If sad music in the car triggers negative ruminations, we can test the effect of replacing it with alternative music when the trigger occurs. There are many such examples, all of which will flow from our detailed functional analysis.

Finally, we can address avoidance directly by increasing the patient's daily structure, their activities, and their routines. This is not necessarily an example of the functional equivalence principle, but a more basic introduction of activities which most people use to structure their lives. It is still important to identify activities which make sense to patients and those which they find desirable or useful. These activities will not necessarily be pleasurable. However, routines do anchor many people to a sense of emotional safety. Simple things such as a regular walk, doing some tidying, and clearing up the dishes may not be the most pleasurable of activities but they can begin the process of activation.

<u>Step 3: Develop a contingency plan</u>

Once alternative behaviours are identified, we should draw up a contingency plan with the patient. This is known as the 'if-then' or TRAC plan. The patient uses this plan in response to triggers identified in the functional analysis.

The "if" component describes the warning signs and context that triggers the problematic behaviour. The "then" component describes the alternative behaviour to enact in response to the trigger. For example, for a patient who tends to avoid confrontation, the contingency plan might be: "*if I notice that I disagree with someone, then I will practise expressing my point of view*". Patients should write down such plans explicitly as part of their homework plans. Because avoidant

behaviour is often habitual, repeated practice at utilising the alternative response is required before it becomes more automatic and well-established.

Contingency plans usually consist of two types of strategy:

- Strategies to break up avoidance and rumination patterns often focused around activity scheduling and problem-solving. These are covered in more detail in the respective sections of this manual.

- Strategies to replace avoidance and rumination patterns. Usually, these should be activities that are valued by patients. These are covered in more depth in the Rumination and Functional Equivalence section of this manual.

The core principle of a contingency plan is to identify the triggers for unhelpful avoidant behaviour as early as possible and to replace the avoidant behaviour with approach behaviour, thereby “nipping in the bud” the avoidant behaviour.

We can suggest any strategy or technique within the BA repertoire as an alternative response to interrupt or replace any identified avoidance behaviour. We select a alternative behaviour that is consistent with the antecedents preceding the target behaviour identified in step 1. The alternative behaviour must fit the original behaviour’s hypothesised function. The exact contingency plan made will need to depend upon the specific patient-centred details shaped by the functional analysis. Any contingency plan is initiated in real life when the specific trigger for the target behaviour occurs. We select alternatives based on the functional analysis described earlier utilising if-then, TRAP, and TRAC plans. A number of possible alternative behaviours are described below.

Exerting environmental control on target behaviour

- If avoidance tends to occur at a regular point in the day, then planning a more active schedule at that time may be helpful. For example, for the patient who tends to sit down and do nothing in a lounge chair on return from work, preventing this sitting down and scheduling in other activities may disrupt the reduction in mood.

- If a patient tends to lie in bed, getting out of bed and doing something else would be an important part of the contingency plan.

Alternative behaviour

- Breaking tasks down into smaller steps

  If an activity seems too big for patients to do, it can feel like it is overwhelming and impossible to do, causing the patient to become avoidant or feel hopeless. It can help to break the task down into the smallest steps possible, choose the first smallest step necessary to start moving forwards, and to start on that.

- Opposite action

If an unwanted target behaviour is linked to a particular negative emotion or feeling (i.e. the Response in TRAP), we need to instigate a plan that generates an alternative emotion. For example, if the danger trigger is feeling low and lacking in energy, the solution could be to undertake a behaviour that is positive and energising.

Patients can sometimes get stuck because they are waiting to "feel right", "be in the right frame of mind" or "feel good enough" to act on one of their plans. We should encourage patients to practice acting towards a goal and acting "as if" the desired state or outcome was present. For example, patients can practice acting as if self-esteem was high and they felt really good about what they did.

Shifting the focus to "acting as if" and following through a plan despite how s/he feels can be an important lesson. It can establish the idea that feelings can follow actions, rather than actions follow feelings.

- *Activity scheduling and building up approach behaviours*

  Where the target behaviour-to-be-reduced acts as a form of direct avoidance (e.g., not seeking work; not talking to family about a problem), it is particularly helpful to examine the pros and cons of this behaviour and to encourage patients to try the actual avoided activities in the real world. We can set up a behavioural experiment where the patient attempts to approach and address difficulties directly. There is an important idea about learning to try things out in the real world, learning from experience, and providing the opportunity for success. In terms of short versus long-term outcomes, it is helpful to review how whilst avoidance can avoid the risk for short-term failure, it also avoids long-term opportunities for positive events and experiences. When selecting approach behaviours, it is important to bear in mind the functional analysis and chose events that are likely to be meaningful, relevant, and valued by the patient. The likelihood of completing planned activities can be increased by setting up situational contingencies for the behaviour such as putting it in a schedule, the patient telling other people what they are going to do and engaging their support, and setting up physical surroundings that are conducive to facilitate the activity. For example, if the plan is to increase exercise, it is helpful to make plans to ensure the relevant sporting kit is easily to hand, that the sporting facilities are nearby and open, and the time for exercise is unlikely to be encroached upon, e.g. Packing up swimming trunks, goggles and towel in a bag and taking it to work, so that the patient can go straight to the swimming pool from work. It can also be helpful to collaboratively order potential approach activities in terms of difficulty and then plan to gradually move through this hierarchy starting with the easiest actions. For further details see the later section on activity scheduling.

- *Progressive muscle relaxation*

  This is useful when there are clear physical stress response and anxiety triggers for the avoidance behaviour and where the patient is using the avoidance to reduce anxiety and/or anger. In this situation, relaxation may provide a more functional alternative.

- *Communication (for further details see Communication Module)*

  When the identified avoidant behaviour is focused on interpersonal situations and involves not addressing issues with other people, work on improving communication might be helpful.

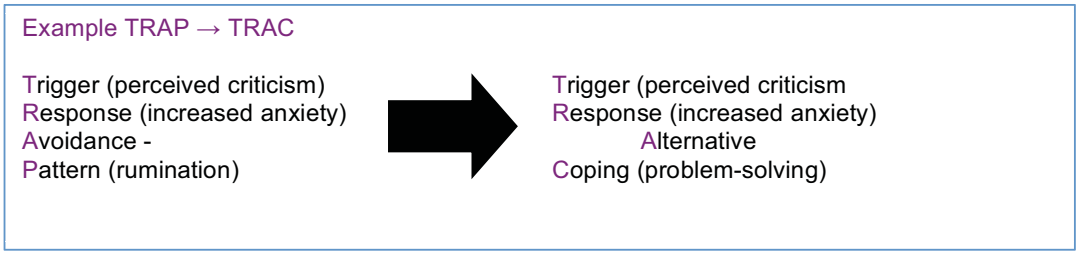
- *Rehearsal and role-playing in the session*

  When planning new approach behaviours that patients are less confident about and feel more hesitant about, especially those involving a social interaction, it may be helpful to explicitly rehearse the behaviour and role-play performing the action in the therapy session.

- *Problem-Solving*

  Avoidance can reflect a failed attempt at problem-solving and planning. Therefore, teaching the patient to practice a systematic problem-solving system, using a recognised and logical set of steps, can thus be a useful alternative. For further details, see later module.

The Rumination module also provides detailed examples of functional analysis and the development of contingency plans.



List of therapy materials used in this module and/or with this technique

Functional Analysis ABC Sheet (Appendix C)
TRAP & TRAC Worksheet (Appendix H)

Useful references:

Addis , M.E. & Martell, C.R. (2004). Overcoming depression one step at a time (pp. 23-44).Oakland, CA: New Harbinger Publications.

Martell, C.R., Addis, M.E. & Jacobson, N.S. (2001). *Depression in context: strategies for guided action* (pp.70-88). New York: W.W. Norton.

Martell, C.R., Dimidjian, S. & Herman-Dunn, R. (2010). *Behavioural Activation for depression: A clinician's guide* (pp. 71-75). New York: The Guilford Press.

Core Technique:

c. Activity Scheduling

c. Activity Scheduling

Introduction and general description of the module/technique

As noted in the page summary earlier, activity scheduling is the final core component of BA. Self-monitoring helps us understand the patient's individual behavioural context. Functional analysis gives us information on the triggers and reinforcers for these behaviours. Activity scheduling is the planned reshaping of the patient's behaviour towards those that are less depressogenic.

The module/technique in detail

Because activity scheduling runs throughout BA, schedules may look quite different at different stages of treatment. However, throughout therapy, activities are always selected with a clear and specific purpose in mind. There should always be a reason why certain activities are scheduled into a person's plan.

The most likely reason is that scheduled behaviours have been selected will be because they represent an alternative to either avoidance or short-term but ultimately self-defeating behaviours. We cannot rely on new, positively reinforcing behaviours appearing by chance. We plan them into a person's life.

It is helpful to think about activity scheduling in seven steps, summarised below.

1. Identify situations and behaviours from the self-monitoring record forms that are associated with the patient's low mood

2. Ask the patient to consider alternative behaviours. These may be anything at all, not necessarily 'anti-depressant' activities. They may be even more likely to lead to depressed mood. It is, however, important to consider the full range of alternatives at this stage.

3. Ask the patient to select one or more of these alternative behaviours and schedule them into a weekly plan (see Appendix G), often as small steps, not giant leaps.

4. As noted in the section on functional analysis, we should encourage patients to adopt an 'experimental' attitude to their activity scheduling. What we mean by this is for them to be curious about the **outcome** of the new scheduled behaviour(s). Rather than a test of perseverance, instigating new behaviours is a test of the effect of these behaviours on patients' mood.

5. Once patients have decided what new behaviours to try and have planned them into their weekly schedule, they should implement them. It is better if this plan includes trying the behaviours more than once if possible. It is better that one new behaviour is tried a number of times than many different behaviours implemented only occasionally.

6. We should encourage patients to evaluate the results of implementing these new behaviours in terms of the impact it has on their mood. Records kept in the activity schedule self-monitoring log should, therefore, include a rating of activity **AND** mood.

7. We now have to ensure patients continue with the experimental attitude. They should not expect ‘quick fixes’. New activities should be tried repeatedly, scheduled in regularly and examined in terms of the outcomes. We should encourage patients to think about a two-three week schedule of activities where similar new behaviours are planned carefully on a regular basis.

The seven activity scheduling steps in more detail

1. Identifying situations associated with low mood

We use the self-monitoring record forms to identify when a patient is feeling low. Taking this situation, time of the day etc., we then investigate what was happening during this time. Matching behaviours to mood is the first essential step. The most useful mood-behaviour pairings are those that happen more than once, often as a regular pattern. We are trying to help patients find predictable times, situations and if possible, regular behaviours that are all linked to low mood.

2. Generating ideas for alternative behaviours

Once we have helped the patient to identify the time-situation-behaviour-mood examples in step 1, we can help them to think of new ‘alternative’ behaviours. It does not matter whether these behaviours are realistic or fanciful, likely to be helpful or make the situation worse. The main objective in step 2 is to think of as many different alternatives to the current behaviour as possible, since the current behaviour is linked to low mood. Even this process itself can be helpful, since it highlights to patients that they may have choices, something many depressed people feel that they lack.

3. Selecting new behaviours and scheduling them into a weekly plan

By now, one or more situations associated with low mood should be accompanied by a list of alternative behaviours. The next stage is to help the patient select one or more activities that you and they believe might improve mood in these situations. During the early stages of therapy, we have to walk a tightrope between over stretching and doing too little. It is far better to choose activities that the patient feels they have a reasonable change of completing. However, many patients can easily get into a ‘boom and bust’ cycle where they attempt too much too soon. Once the activities are *selected* they should be *scheduled.* Using an activity scheduling record sheet is absolutely essential so that patients have a clear plan of what they will do and when they will do it.

4. Experimenting

This is not so much a step as an overarching attitude. We must encourage patients to think curiously about what effect the new behaviour has on their mood. It may make them feel better; it may make them feel worse. This is where we can reiterate the ‘outside-in’ principle. We should make sure that patients are not waiting to feel better before they implement an alternative behaviour. The main thing is to see what the **outcomes** of the new scheduled behaviour(s) are. If you really instigate this manner of thinking then you guard against disappointment, since any result is going to be useful for discussions at the next appointment. There is no success or failure, just interesting information to review and reflect on.

5. Implementing alternative behaviours

Quite simply, this step is when the patient leaves the appointment with a plan and they complete the activities specified in that plan. Very importantly, they should record these activities *and* their mood during them, using the self-monitoring record forms used earlier. You should advise the patients to make sure they are fully involved in implementing the planned behaviours, focused on them and not distracted or thinking about something else. Secondly, you should advise patients to wait until the behaviour is finished before evaluating it. Finally, all experiments need replication. Implementing alternative behaviours is no different. Remind patients to try the new activities several times.

6. Evaluating the effect of the alternative behaviours

The great beauty of record keeping is that we can use them to compare progress. Self-monitoring record forms with new activities scheduled on them can be compared with old sheets. The important piece of information to compare is how the mood ratings have shifted or not in response to the new behaviours. This is the 'raw data' from which we can evaluate the success or failure of the alternative behaviours. This data tells us much about the impact of behaviours on mood. We use these ratings as major discussion points in our next session or sessions. We should always focus on what we can learn, and what the ratings tell the patient about mood and behaviour links. It is not a success or failure conversation. It is a learning conversation.

7. Continuing to experiment

As stated above, regular and repeated practice is the way to embed new, more helpful behaviours into someone's life. There are no really quick fixes. We need to help people make the new more helpful behaviour a very regular part of their lives. Each week's activity records should be scheduled to this effect.

Of course, this is only desirable if the new behaviour has had a positive effect. If not, more experiments are needed, trying out new behaviours in new situations. Recording this carefully, including ratings of mood will help patients understand the connection between mood and behaviour and make the 'outside-in' link. If the experiment has not been successful the first step is to check to see if the patient was fully involved in what they were doing. Secondly, if this was true, we can help them select another behaviour, reflecting on what it was about the previous one that did not do the trick. Avoid giving in too easily, however. Often it might be a good idea to try an alternative behaviour a few times before giving up. Finally, make sure patients record their mood soon after undertaking the alternative behaviour. When people are depressed they often find it difficult to remember exactly how they felt at the time of doing something, particularly if their mood is very low. What we want are accurate ratings, not inaccurate retrospective accounts.

Other points

Activity scheduling in the early stages of treatment can take one of two forms. Either, the self-monitoring will have identified very clearly that some basic activities are just not happening, or a patient will want to replace obviously negative behaviours with alternatives. The latter is an example of how problem solving as a state of mind runs right through BA. Initially, selection of behaviours may not flow from a TRAP/TRAC

analysis. It may be absolutely obvious that a person needs to do something immediately to stabilise their situation. It is important that patients do not wait to feel ready to do these things, but do them to help feel better over time.

Generally, however, we encourage patients to plan activities in a purposeful way. Activities are selected that have a clear focus and are drawn from the insights of the functional analysis. Planned activities may include new 'functionally equivalent' behaviours to replace activities that are no longer possible in a person's changed life. Activities may be a return to old behaviours that have been dropped or avoided. Activity schedules may be explicitly about reducing current behaviours that are actually depressogenic. Some scheduled activities may be used to disrupt depressed thinking or behaviours in the face of known danger signs and triggers.

The main message to give about activity scheduling is that it runs throughout the whole course of a BA programme. Planned behaviours all have a clear rationale, are best if they represent the implementation of a person's value set, and are often designed in an experimental way. Patients act as scientists in their own personal laboratory, investigating the impact of reducing negatively reinforced avoidance and increasing positively reinforced behaviour. What we expect is that if we understand the triggers and contingencies, once we schedule in the behaviours the reinforcement effects will take over and help shape the person's behaviours in a more positive direction.

Alongside self-monitoring record forms, activity scheduling records will be the most frequently used and discussed tools in the behavioural activationists armoury.

Activity scheduling is not a particularly difficult behavioural activation technique, but it can be done badly, nonetheless. Once a patient has got familiar with the idea of self-monitoring situations, behaviours and mood, we can use functional analysis to help identify a way out of the TRAPs people find themselves in. Selecting alternative behaviours to address these TRAPS and get on TRAC is the trick to activity scheduling. Activity scheduling may seem like only the planning of things to do. It is much more than that, however. It is the pathway out of depression. Our job as therapists is to provide patients with a map of that path.

List of therapy materials used in this module and/or with this technique

Self-Monitoring Record Form (Appendix D)

Activity Planning Tool (Appendix G)

d. Phase II Modular Techniques

i) Rumination Module

d.i) Rumination Module

Introduction and general description of the module/technique

This module is based on the development and evaluation of treatments for rumination (BA for rumination; concreteness training) conducted by Watkins over the last 15 years. It includes material directly adapted from existing manuals (copyright retained, © Watkins, 2004, 2008, 2009, 2011). For further details please see Watkins et al., 2007; Watkins, 2007, 2009; Watkins et al., 2009; Watkins et al., 2011; Watkins et al., 2012.

Rumination is repetitive negative thought, a covert mental process common in depression. It tends to focus on self, negative mood, problems and difficulties. Rumination is characterised by judgemental, evaluative thinking and often includes negative comparisons, focused on the meanings and implications of events, for example, "*Why me?*" "*Why can't I feel better?*"

From a BA perspective, rumination is a form of avoidance that has been negatively reinforced in the past through the removal of aversive experiences. The reinforcement of rumination may involve:

1. Superstitious reinforcement, i.e., a false association between rumination and a positive outcome as a result of the person interpreting ruminating and the positive outcome occurring close together, as connected

2. Partial reinforcement, i.e. there have been times when rumination was useful and intermittently functional. This 'intermittent reinforcement schedule' means that it is hard for the behaviour to reduce when no longer of value

3. Poor discrimination between repetitive thinking which is helpful, such as helpful thinking about problems in a problem-solving manner, and unhelpful brooding.

The potential avoidant functions of rumination are numerous but may include: avoiding job challenges or the tedium of the daily grind; avoidance of the risk of failure or humiliation by putting off doing something by thinking about it instead; cognitive avoidance or worry through mental preparation, planning and attempted cognitive problem-solving; pre-empting other's criticism and anticipating potential negative responses through second guessing or mind-reading to avoid actual criticism; controlling one' feelings; making excuses.

The view taken by contextual-functional approaches to depression such as BA (Martell, Addis & Jacobson, 2001; Watkins et al., 2007) is that rumination may be more frequent and extensive if it has been learned in the course of someone's life in response to particular environments with perceived positive consequences. This module describes how the BA approach, and in particular functional analysis, is used to treat rumination (see Watkins et al., 2007, 2011). To do so, we have to think about rumination as a behaviour and undertake rumination-focussed BA exercises just like we do for physical behaviours themselves.

The key elements of this rumination module are:

- A patient-centred assessment with a clear rationale for the focus on rumination, building on the idea that rumination is learnt behaviour. We incorporate the patients' developmental history into our rationale.
- Practice at spotting rumination, avoidance, and early warning signs, using formal homework such as monitoring records that also include reports of rumination.
- Functional analysis to examine the context and functions of rumination, when rumination occurred what preceded it and what its consequences were.
- The development of contingency plans, involving different and more helpful responses to rumination triggers.
- The use of experiments to examine whether rumination is adaptive or not and to try out alternative strategies.
- Increased activity and reduced avoidance, building up routines, and increasing non-ruminative activities, explicitly targeting behavioural changes**.**
- Exercises to provide experience of using attention as a counter to rumination to establish alternative thinking styles, such as problem-solving or a focus on being engaged and absorbed in the world rather than in one's head.
- A focus on the patient's values to minimise rumination about non-valued areas and to encourage activity in line with values.

The module/technique in detail

Step 1: Rationale and explanation of rumination

It is usually helpful to provide patients with information on rumination and to check that it matches their personal experience. We can acknowledge rumination as a common, understandable, but unhelpful process. This strengthens our rationale and helps to develop the therapeutic alliance. The rationale builds on the established functional-contextual approach used throughout BA. The history and development of rumination can be identified and made sense of with the patient. Most patients find that the explicit recognition of rumination and worry is very helpful as it may not have been discussed with them before.

Summary of the treatment rationale:

Recurrent negative thinking and avoidance are the central engines maintaining depression. Both avoidance and rumination are quite normal and functional in limited amounts under the right circumstances. However, when used excessively or when they are out of balance, they can become a problem. Excessive use occurs because of past learning that rumination was at least temporarily beneficial. Because it was learnt, it can be replaced with a new more helpful strategy. Therapy teaches patients to learn a new personalised and more adaptive approach. This leads onto the functional analysis. The joint development of this rationale can be used to explicitly normalize rumination, e.g., discussing how we all ruminate some of the time, and how it makes sense to ruminate under the patient's particular circumstances.

After this general rationale, we can review the patient's own experience, talking through the overall effects of rumination including recent examples. We can get a sense of how it may have developed as a learnt behaviour, and generate evidence of how it is unhelpful. By reviewing the development of rumination as a learned behaviour we can see how the development of rumination makes sense in the

context of the individual's life. For example, ruminating about how someone else thinks about you could act as a means to second guess a difficult parent and avoid criticism and abuse. The problem arises where rumination has become overgeneralized to other situations.

This initial rationale phase therefore includes assessment of rumination generally and specifically. The purpose is to understand where rumination is a major problem involving extensive unproductive dwelling on negative material, examine the consequences of rumination, identify rumination as the target of therapy and explain what rumination is, using examples from the patient's own experience. The focus is on identifying rumination as recurrent, repetitive thinking about self, mood, problems and difficulties that is unhelpful and in which patients get stuck. We can use terms such as 'rumination', 'brooding', 'worry', 'getting stuck in my head', 'going round and round in my head', etc. It is good practice to use the term that makes most sense for the patient and reflects their own use of language.

It is noteworthy that rumination has been implicated in both anxiety and depression, so targeting of rumination may be particularly beneficial for addressing such co-morbidity.

An important part of this rationale is the identification of rumination as a learnt habit, i.e. as an automatic TRAP response triggered by particular circumstances. This idea is straightforward, plausible to patients, and naturally leads into a discussion of how it might change. The discussion on change can begin through the identification of triggers for rumination, and then considering either removing those environmental or internal triggers and/or learning of new habits through repeated practice of an alternative response to the same trigger. It can be useful to reflect on any lessons learnt from a patient's prior experience of changing habits, for example study habits, exercise habits, eating habits and smoking habits.

Step 2: Functional analysis

In addressing rumination, we use exactly the same functional analytic principles as used more generally in BA. We apply this to understanding the particular functions of rumination including understanding, self-motivation, planning, avoiding, etc.

The functional analysis is then used to help patients:

- Recognise warning signs for rumination as cues for the 'rumination habit'
- Develop alternative strategies and contingency plans which are incompatible responses to that of rumination and which either interrupt the bout of rumination or replace the function of rumination with a more constructive alternative such as approach behaviour, problem-solving, compassion, absorption, connecting with experience, assertiveness or relaxation.
- Alter the environmental and behavioural contingencies maintaining rumination, towards more self-fulfilling activities.
- Shift towards more helpful thinking.

This plan can incorporate the TRAP and TRAC plans typically used in BA with a focus on rumination.

Antecedents: common triggers for rumination include:

- Stressful situations, for example, when there is too much to do, when being judged, when bored, when being criticised, when reminded of a particular event.
- Certain places, for example, at home, private space, in bed, at school or college or work. Many people report that they ruminate in particular places such as when lying in bed, when sitting down for a coffee. Individuals may have got into routines where they tend to ruminate at particular places and times. Identifying the routine and then shifting away from it can be a useful approach to break out of the rumination.
- Certain times of the day. The most common times reported for ruminating are first thing in the morning just after waking up and in the evening, at the end of the day, often lying in bed, not able to sleep. Frequent rumination at these times makes sense because these are times when someone may anticipate or reflect on the day, and also tend to occur when less physically active and when there is less external distraction.
- A number of physical and bodily responses are common warning signs for rumination, including tension in the shoulders, neck or back, feeling wound up, anxious, irritated and frustrated. Other warning signs include a person's tone and volume of voice becoming louder and more critical, becoming hot/ flushed, increased heart rate, butterflies in stomach, sinking feeling, heavy feeling, upset stomach.
- Certain behaviours can be a risk factor for rumination, for example, becoming inactive, lying around and not doing much, putting things off, rushing around, avoiding people, confronting people, withdrawing, thinking rather than doing.
- Particular aspects of thinking are also common warning signs and triggers for rumination, for example attention narrowing onto a single concern or problem and becoming closed and rigid into a kind of 'tunnel vision', finding it hard to concentrate on other things, thinking becoming chaotic, muddled, messy and woolly, a mind that is 'whirring' and jumping from one thing to another, self-doubt, thinking that is moving away from the particular situation to consider other situations, self-criticism, focusing on how the way things are going is different from how one expects or wants them to be. Much of this way of thinking can be seen as "*Why?*" thinking.

Identifying these warning signs can be used to try to help patients 'nip rumination in the bud' by engaging in counter-ruminative activities before the bout of rumination gains momentum. For example, for physical triggers, activities such as relaxation to reduce stress and arousal may be helpful in preventing thinking escalating into a bout of rumination. For external environmental triggers, leaving the situation or changing the environment can prevent the rumination. If a mental sign such as narrowing attention is a warning sign for rumination, a useful alternative may be a deliberate attempt to expand attention outwards to the world rather than inward on the self. This strategy is described by Martell and colleagues as connecting with the environment, in which the patient pays close attention to the world by going for a walk for example, and being as aware as possible of the sights and sounds of the countryside.

Behaviour: the function of rumination. During the functional analysis we provide some explanation of how rumination as a habit makes sense, usually because

patients' past experiences have taught them that rumination provided an initially helpful function. Habits tend to develop through repeated practice of an action and when the action gets some pay-off it is reinforced. It is therefore useful to find an alternative response that has the advantages and not the disadvantages of ruminating, an alternative behaviour that has some of the same pay-offs but without the downsides making it more likely that the new helpful response will persist.

Consequences: examining the consequences of rumination provides further information about the function of the ruminative behaviour.

Here is a list of common functions for worry and rumination that we can use to check with the patient to see if they are consist with their behaviours:

- To help predict what could go wrong and prevent bad things from happening
- To try and understand and problem solve a problem or difficulty
- To motivate and stop letting things slip
- To try and be certain about the best way to do something before acting
- Because it is safer to "*do it in my head*" than to take a risk in the real world
- To put off doing something
- To punish
- To try and mind-read and second guess others
- To change emotions
- To avoid becoming the kind of person a patient does not want to be
- To avoid the risk of failure or embarrassment
- To justify the way a patient is feeling
- To stop letting go of something important

For example, for a patient who ruminates in response to feeling angry, and for whom the consequence of rumination is to reduce anger but maintain depressed feelings, we would formulate the rumination as serving the function of controlling anger. Further exploration of the patient's history might then reveal that he had a very violent and aggressive parent and that he is afraid of becoming like him and losing control of his temper – such that for him being angry is very aversive. Thus, rumination for him is focused on putting himself down and minimising his own importance and acts as a form of avoidance that is negatively reinforced because it serves to reduce this aversive anger. This is despite rumination being a trigger for his depressed feelings.

<u>Step 3: Contingency plans for disrupting rumination</u>

We can suggest any strategy or technique within the BA repertoire as an alternative response to interrupt or replace rumination. We select the alternative behaviour that is consistent with the antecedents to the rumination and fits the hypothesised function. The exact contingency plan made will need to depend upon the specific patient-centred details shaped by the functional analysis. Like any contingency plan, it is initiated when a specific trigger for rumination occurs. We select alternatives to rumination based on the functional analysis described earlier utilising TRAP and TRAC plans (or formulated as if-then plans, as described in the functional analysis section).

Exerting environmental control on rumination.

- If rumination tends to occur at the point that a patient is sitting down at the end of the day and beginning to reflect on the day, then planning a more active schedule at that time may be helpful

- If a patient ruminates when listening to sad music, a simple environmental change would be to play different music

- If a patient tends to ruminate when lying in bed, getting out of bed and doing something else might break the rumination.

In each of these cases, the change in behaviour could be investigated as an experiment to determine its effect on rumination and other symptoms.

Interrupting rumination.

- Slowing things down

  We can use this when patients describe situations where they have too much to do. In these cases they might feel anxious, experience physical reactions such as a pounding heart, try to do everything at once, and have thoughts which jump from one to another. If rumination occurs when patients are trying to do too many things at once, it might help to slow things down and to focus on only doing one thing at a time, to pace themselves, and to prioritize what they are doing.

- Becoming more active

  Here the opposite situation is the case, where patients are bored and don't have anything to do, are inactive, and experience ruminative negative thoughts. In this case we can encourage patients to plan to be more active and do something interesting, enjoyable, or merely useful at those times. It might also be useful if the patient clarifies their schedule and sequence of activities over the week to identify particular times that tend to have more 'dead time' so they can plan to be more active at those times.

- Breaking tasks down into smaller steps

  If a looming deadline or other activity seems too big for patients to do, it can feel like it is overwhelming and impossible to do, causing the patient to become stressed and start ruminating. It can help to break the task down into the smallest steps possible, choose the first smallest step necessary to start moving forwards, and to start on that.

- Opposite action

  If rumination is linked to a particular emotion or feeling, it can be helpful to have a plan that generates an alternative emotion. For example, if patients ruminate when feeling tense or irritable, they can plan to do something calming or relaxing

to head off the tendency to ruminate. Even simple examples like looking down at the ground when feeling sad can be changed to standing straight and looking up. Changing activity is another example, when patients would rather stay at home they can use this as a trigger to go outside and do something active. Opposite action means acting in a way that is different than the emotion felt so that patients actually act themselves into feeling differently. This doesn't mean patients pretending not to feel their emotion since it may be perfectly appropriate to do so. Opposite action just means that patients decide it is not helpful to act on the emotion they are feeling in the moment.

Other behavioural techniques to counter rumination.

- *Activity scheduling and building up approach behaviours*

  Where rumination acts as a form of direct avoidance it can be helpful to examine the pros and cons of this behaviour and to encourage patients to try the actual avoided activities in the real world. We can set up a behavioural experiment where the patient attempts to approach and address difficulties directly. Even when patients do try out something in real life and it doesn't end up the way they wanted, they can learn something by it, namely that many things in life can only be addressed through trial and error, learning how to do it through experience rather than by ruminative analysis. It is important to explore and experiment with patients whether some skills and abilities are best developed through experience rather than conceptual analysis, e.g., "Can you become good at interacting with others just by thinking about it?" Rumination is often more frequent when individuals are busy with activities that they feel they are obligated to do ("responsibilities", "chores") but do not enjoy. Building in activities that individuals are excited and enthusiastic about can be important to reduce such rumination.

- *Progressive muscle relaxation*

  This is useful when there are clear physical stress response triggers for rumination and where the patient is using rumination to control their feelings and reduce arousal such as anxiety or anger.

- *Communication*

  When rumination is focused on interpersonal situations and the avoidance of addressing issues with other people, some work on improving assertiveness and communication might be helpful.

- *Rehearsal and role-playing in the session*

  Rumination often involves thinking over and over again about possible future events and the outcomes of trying a new thing. Patients typically get caught up in thinking through the implications of such action in terms of "*What will happen?*" This function of rumination concerns trying to be certain about will happen or to avoid bad things happening. In these situations, the strategy is to teach the patient to replace repeated thinking about the possible outcomes with 'concrete rehearsal' of what the patient will say and do. This move from abstract to

concrete thinking, as preparation for going and doing the activity can be enhanced through rehearsal and role-playing in the session.

- *Problem-Solving*

  Rumination can be a failed attempt at problem-solving and planning. Therefore, teaching the patient to practice a systematic problem-solving system, using a recognised and logical set of steps, can thus be a useful alternative (see section on Concrete thinking later and module on Problem Solving).

- *Increasing absorption and connection with experience*

  One of the common effects of rumination is that it can interfere with the ability to connect directly with the reinforcing experience of a rewarding activity. For example, even though a patient may be doing an activity such as going for a run that they previously experienced as rewarding and pleasurable, if s/he is ruminating this may block any rewarding effect. This may be because: the focus of the patient's attention is internal and self-focused rather than on the activity itself; their rumination is abstract or evaluative and may involve negative comparisons such as "*I used to be much better at this*" or "*This is harder than I expected.*" Ruminations in this type of situation often occur in the form of an internal 'running commentary' on the activity that interferes with the potential benefit of the increased activity. Finding ways to become more absorbed and connected with experience is therefore a useful means to interrupt rumination and to optimise the impact of activity scheduling.

  Absorbed "flow" states tend to involve: a deep and effortless involvement in activity with a merging of action & awareness. In order to optimise absorption, activities should be challenging but manageable and patients should focus directly on the task in hand in the here and now. It is better if the patient focuses outwards towards the external environment with an activity that provides immediate feedback, for example, when playing a musical instrument one can hear immediately whether the right note is played. Activities that have a delay between activity and outcome (such as waiting for a response from others) should be discouraged. Activities where patients can feel a sense of control and which are rewarding – valued as an end in itself – are particularly helpful for absorption.

<u>Helpful versus unhelpful repetitive thought</u>

An important element within any functional analysis of rumination is to recognise that sometimes dwelling on a problem can be helpful, for example, when problem-solving, or when coming to terms with an upset or loss. This is a reason why people learn to ruminate – because there have been times when thinking through a difficulty has paid off. We need to help an individual recognise when repetitive thinking is helpful or unhelpful, and to tell the difference between rumination and problem-solving.

Identifying at least two episodes of repetitive thinking that have different outcomes (one helpful versus one unhelpful; one relatively short vs. one relatively long) will help the patient unpack these differences. We should painstakingly investigate the sequence of each bout in specific detail, including the environment in which it occurred (external context and internal state) and the moment-by-moment sequence of thought, feeling, behaviour, consequence. This involves detailed questioning to recreate the scene of the event and a moment-by-moment fine-grained analysis of how it occurred. Asking about When, Where, Who, What, How will help the patient to describe the actual behaviours that occurred, including internal behaviours such as what the patient is saying to her/himself, his/her attitude to the situation, what s/he is attending to; the way they are approaching the situation etc. Once we have two detailed descriptions of the bouts, we can compare the details to identify differences between them that provide clues as to factors that determined whether the bout was helpful or unhelpful. We can help the patient test these factors in behavioural experiments and incorporate them into future contingency plans.

Concrete versus Abstract Thinking

Rumination is often characterised by abstract thinking focused on the meanings and implications of events. Patients will often ask, “why did this happen? Why me? What does this mean about me?, Why can’t I get better? Why is this so difficult? Why do other people treat me like this?” Patients thinking in an abstract way focus on evaluating the reasons, meanings, consequences, and implications of behaviours and events rather than the specifics of a situation. Abstract thinking leads to patients overgeneralising beyond the details of the situation, losing perspective, and finding it difficult to solve problems because thinking ends up being remote from the immediate situation. When talking over examples of bouts of rumination with patients, it is useful to note down the full list of “Why” type questions that someone asks himself or herself.

In contrast to abstract thinking, people can also think in a more concrete way characterised by the what, when, where and how questions that provide a detailed grounding in the situation, for example, “How did this happen? What did I do? What did he do? How did this problem start? How can I move forward from here?” Being concrete and specific tends to be helpful because it gives someone more cues as to how to solve a problem. There is greater detail about the situation and what was done, events are kept in proportion, and a more active approach is likely because people are focussing on behaviours that can change rather than on personal characteristics that are harder to change.

We use functional analysis of rumination to determine whether patients are thinking in abstract or concrete ways. This distinction is often an important factor determining whether thinking about a problem becomes unhelpful rumination or useful problem solving. We can then teach patients to practice asking themselves the more helpful “How?” questions in response to rumination warning signs.

A useful within session behavioural experiment is the ‘*How vs. Why’ experiment*, in which we prompt patients to think about a recent rumination situation. We first ask the patient to imagine that situation as vividly as possible and whilst imagining him/herself in that situation, prompt him/her to ask themselves ‘Why’ type questions.

Ideally, we prompt the patient with the "Why" type questions identified in previous functional analysis of rumination. We then ask the patient to reimagine the same situation accompanied by prompting with 'How' questions as noted above. We rate mood, confidence, energy etc. before and after each type of practice using 0-10 scales to give patient's first–hand experience of the impact on mood of thinking in these two different ways. Typically, patients will report better mood, confidence, energy or generation of solutions in the *How* condition than the *Why* condition. This can provide a dramatic demonstration of how their approach to a problem can influence outcome. This experiment can then be followed by building the use of How questions into contingency plans in response to triggers for rumination. This can be facilitated by audio-taping the session and giving the patient the tape to remind them of the exercise.

One helpful technique is to give patients a cue-card as a reminder to ask themselves the following questions when faced with warning signs of rumination. These questions may also be useful prompts for the *How-Why experiment*.

1. Focus on sensory experience and notice what is specific and distinctive
    - Ask yourself: "What is happening? How? Where? When? With whom? How is it different and unique from other events?"
2. Notice the process by which events and behaviours unfold
    - Be aware of the sequence of events, what comes before, and what follows after each action and event. Notice the series of steps, of actions and events that lead up to an event.
    - Look out for clues or warning signs.
    - Look out for turning points. Notice any points or steps where a different decision, action or circumstance might change the outcome.
    - Ask yourself "How did this come about? What are warning signs? What might change the outcome?"
3. Focus on *how* you can move forwards
    - Plan. Ask yourself how you can break things down into discrete, manageable steps which you can take to move forward into helpful action.
    - Act. Take the first step in the chain of actions (whether mental or physical) that you can do to deal with a given difficulty and then follow the sequence, step by step, dealing with new difficulties as they arise and acknowledging your own progress when things go well
    - Ask "How can I move forwards? How can I break this down into smaller steps? What is the first step I can take?"

As noted earlier, the use of such alternative behaviours is best practised in the session and then repeated over several weeks to enable the behaviour to become well-established.

A good guideline that a patient has shifted into more concrete thinking is that their description of events is focused on explicit behaviours rather than interpretations, and that it produces a clear visual image of what happened in the therapist's mind. For example, a patient may describe an event as "He insulted me". This is still somewhat abstract as it describes an interpretation of the behaviour rather than an actual physical behaviour. Asking concrete questions (as above) to help the patient describe the behaviour in terms of observable physical acts ("He turned away from

me when I asked him a question") can be very helpful in clarifying the situation. (See Modules on Problem-Solving and Communication for further examples of encouraging concreteness).

There are also a number of rules-of-thumb that can help patients discriminate between helpful and unhelpful thinking.

First rule of thumb: Is this an unanswerable question?
Is the focus of your thinking the kind of question to which most people would find it hard to have a definitive answer? Is it the kind of question where the possible answer keeps changing or is too open-ended? If it is, then it may not be helpful to keep thinking about it. This is particularly the case when it comes to understanding people, emotions, and when asking existential and philosophical questions, for example, "Why me?" questions.

Second rule of thumb: Stop worrying if it leads nowhere after a period of time
Keep in mind how long you have been worrying. It is helpful to be aware of how much time you spend going over and over something in your mind before you find a solution, come up with an idea, or make a decision. How long does it normally take to come up with a useful answer or make a decision? People often report that effective thinking mostly leads to an answer in about half an hour of concentrated thinking, whilst unhelpful rumination can go on for hours without leading to a solution. Moreover, people often report that the solutions to problems come to mind when they are not even thinking about the problem but when they go to do something else, freeing up their mind to relax and be more creative, so that the problem can be worked on subconsciously.

Third rule of thumb: Ask yourself "Are these thoughts leading to a decision or action?" If not, your thoughts are probably too abstract and unhelpful.
If your thoughts about a problem just lead to more thoughts, then you are probably being too abstract and you are likely to end up in a spiral of worrying, overgeneralizing, and inactivity. However, when your thoughts about a problem lead to a response to the problem, whether that it is a plan or a decision, or to some kind of action to deal with the problem, then your thoughts are concrete and it is much more likely to be helpful thinking rather than unhelpful worrying. The plan or decision could include deciding to do nothing or to accept something or to let go of something. This 'concrete thinking' is exactly what you should do when confronted with difficulties or stressful events: – this is where asking "How?" could be helpful, as it makes it more likely that you are 'problem solving'.

Exercises with patients associated with the module/technique

TRAP and TRAC exercises; ABC.

List of therapy materials used in this module and/or with this technique

Functional Analysis ABC Sheet (Appendix C)

TRAP & TRAC Worksheet (Appendix H)

d. Phase II Modular Technique:

ii) Problem Solving Module

d.ii) Problem Solving Module

Introduction and general description of the module/technique

Patients with depression may experience difficulties with solving problems for a number of reasons.

First, as emphasised by the contextual approach underpinning BA, patients may become depressed because of changes in their circumstances which represent problems they cannot easily solve. These can be thought of as *primary problems*.

Second, the consequences of depression such as low energy and motivation, and increased avoidance can create further problems in the patient's life which may lead to the patient feeling overwhelmed with problems. These can be thought of as secondary problems.

Third, Martell and colleagues (2010) highlight the potential for depression to impair problem-solving abilities. This may be as a result of impaired ability to plan, manage and remember important activities or through an increase in over-general and abstract styles of thinking, leading to rumination.

Finally, some patients with depression may never have had the opportunity to learn effective problem solving skills, for example because attempts to actively problem solve were not modelled or positively reinforced in early life, or because passive means of problem solving such as allowing others to deal with difficulties on one's behalf were reinforced.

The general approach we take as therapists in Behavioural Activation work could be described as a problem-solving one: we support the patient to clearly define in behavioural terms the difficulties they are struggling with, identify, try out, and evaluate means of solving the problem. Thus, therapists and patients are engaged in problem-solving by conducting functional analysis, selecting and implementing alternative behaviours, and evaluating the results of this. In BA problem solving tends to be woven through the fabric of the sessions, and does not necessarily involve the therapist 'teaching' the patient an explicit set of steps to be followed. That said, for some patients it may be appropriate to move from supporting them in solving their problems to explicitly equipping them with a framework to use for this.

The module/technique in detail

This module describes the overall problem solving approach in two ways. Initially, we will consider the general problem solving therapy attitude as a series of steps in a therapeutic conversation. Secondly, we will outline the formal seven step problem solving approach which can be taught to patients.

1. Problem solving as a therapeutic conversation

Step 1: Defining the problem in concrete, behavioural terms

If the patient has stated their problem in abstract terms it is important to elicit a specific behavioural description of it. For example, Clara has the problem "I feel tired all of the time": a specific description might be "When the kids come home from school I notice that I feel tired and overwhelmed at the prospect of spending time with them. Three times this week I made an excuse to my partner that I needed to do some housework instead of spend time with them, even though I did very little of it. I felt guilty the whole time, and then when we ate dinner together I was beating myself up about it in my head so much I didn't join in with the conversation."

Useful questions to help patients define their problem include:

- Can you tell me about a time recently when this problem flared up?
- Can you tell me about a time in the last week when you noticed that this problem got in the way of what you needed or wanted to be doing?
- If I had been with you last week, what would I have seen happening when this problem was going on for you?
- If we could wave a wand and get rid of this problem overnight, what would you be doing differently tomorrow that would tell you the problem had gone away?

Step 2: Identifying alternative behaviours and selecting one to try

Once we have a concrete description of the problem, possible means of addressing it can be discussed. Questions that can help this process include:

- What might you do differently?
- What have you thought about trying?
- Have there been any times when this problem occurred and you were able to deal with it effectively?

We can undertake this step formally by listing (see Appendix J) or less formally as part of the session conversation, in each case making sure that the relative advantages and disadvantages of each option are discussed. In Clara's case, watching a DVD with the children may suit her but not the children's needs. A better plan might be to engage them in a more energetic outdoor game to burn off their energy.

Step 3: Planning to implement the new behaviour

Once a suitable behaviour has been identified, we help the patient identify the steps s/he needs to take to put the solution into action. The plan should be concrete and specific. Some solutions will require preparation in advance. For Clara, setting up the garden for an outdoor game. For many others, explaining the plan to partners. Ideally we are aiming for the patient to schedule in a specific set of behaviours for the coming week, for example "Tonight after the kids are in bed I will tell my husband what I am planning to do. On Tuesday I will go out at 3pm and set up the garden for a game of football. When the kids come home I will invite them to play football for 15 minutes, after which I will return to the housework. During the game of football I will

be in goal – this feels like it will be less tiring for me than running about." In planning to implement a solution further challenges may come to light. It may be necessary to break the solution up into smaller steps, some of which can be completed before the next session.

Once a plan has been formed, we can encourage the patient to visualise putting the solution into action. By asking the patient to 'see' a video in his or her mind's eye of the solution in action, s/he is encouraged to think in concrete terms about the steps involved. As well as visualising the potential benefits of the solution this process can reveal previously unnoticed barriers to its implementing which can be then be addressed. This technique is described in detail in the next section.

Step 4: Reviewing

In the next therapy session the chosen behavioural solution is reviewed. Patients are encouraged to be specific about what happened, what behaviours were enacted and what the consequences were. When solutions are difficult or painful patients often report affective consequences "it made me feel anxious". We should specifically ask them to what extent enacting the solution solved the problem they were addressing. Lessons learned from this can then be used to determine the next step.

Issues to be aware of whilst solving problems with patients

- Whilst primary problems can be the 'big' issues that patients have difficulty with, and that may have contributed to the onset of depression, these can often be very challenging to address. Therefore it can be more motivating for patients to begin solving secondary problems, in other words, difficulties that have arisen as a consequence of the affect evoked by the primary problem. For example, a patient may have difficulties in his relationship with his wife (primary problem). This situation leads him to feel sad and anxious (secondary problem). Unable to resolve the situation he turns to 'solving' the problem of his negative mood by drinking alcohol and spending his spare time surfing the internet (avoidant coping). Therapy might involve first working with him to find other ways of responding to negative mood that are more adaptive in terms of serving his valued goals, before moving on –if appropriate – to exploring ways of responding to the difficulties in his relationship.

- It can be useful to identify whether the problem is contributed to by an avoidance pattern, a skills deficit, or a combination of the two. For example, the patient may be engaging in a particular behaviour because it functions as a means of avoiding negative emotion (in other words, they are caught in a TRAP). In such situations, the patient is trying to solve the problem of feeling bad, but his or her attempts at 'solving' the negative feeling are not effective in the long term, and do not improve the situation that has triggered the bad feelings. In Clara's case, she may be responding to feelings of being tired and overwhelmed by the prospect of spending time with her children by avoiding doing so, resulting in temporary relief, but intense feelings of guilt in the longer term. Alternatively, or in addition, she may not know how to spend time with her children in a way that is rewarding for all involved and does not place excessive demands on her energy levels, i.e. she does not currently have the skills to do this. These possibilities have different

implications for solving the problem: if avoidance is a key factor, the skills around TRAP/TRAC are highly relevant; if the patient is prevented from solving the problem because s/he does not possess the necessary skills to do so, patient and therapist may need to look at how these skills can be acquired or practiced (for example planning for and role playing an anticipated conversation in which particular communication skills are needed).

- Various factors can make it difficult for patients to solve problems, and resort to avoidant means of coping with the surrounding emotions. However these responses are understandable in the context of patient's' learning histories. The therapist's stance should be one of validating the patient's natural desire to avoid, whilst at the same cheerleading him or her through the process of making changes.

Exercises with patients associated with the module/technique

Visualising enacting the solution

Once a potential solution has been identified, visualisation can be used to solidify the plan, anticipate challenges and anticipate positively reinforcing aspects of engaging in the behaviour.

The patient is asked to close his or her eyes if comfortable to do so, and to recreate in their mind's eye the situation s/he will be in right before enacting the solution. The therapist asks the patient to see the situation as if through his or her own eyes (rather than seeing themselves from a detached perspective), and to talk the therapist through what s/he is doing in the present tense, for example "I am walking through the back door towards the shed. I am opening the shed door and looking for the football..". At the start of the exercise the therapist can ask the patient to describe sensory details such as sounds, smells, temperatures, etc. to help themselves recreate the situation and feel immersed in it. If the patient becomes overgeneral about the steps s/he is enacting, for example "the kids come home and we play football", s/he can be invited to go back and talk through the physical steps s/he is taking as this part of the video unfolds.

After the exercise is complete the patient can be asked about the extent to which s/he was immersed in the visualisation, and then about what they learned from it, and what changes s/he would make to the plan as a consequence.

2. Teaching problem–solving as a formal technique

In addition to the less formal means of helping patients to solve problems outlined above, therapists may formally 'teach' problem solving to patients. This involves several steps:

1. Introducing the idea of problem solving and giving a rationale. This might involve explaining to patients that depression can be associated with difficulties in problem solving for the reasons outlined in the introductory section, and then looking together at the potential benefits of learning, or reconnecting with,

problem-solving skills. The patient can be introduced to the idea that there is a series of steps that can be followed when faced with a problem to solve.

2. Setting out the steps to be followed, namely:

   1) identifying the problem and determine the costs and benefits of attempting to solve it versus not doing so

   "Identify the problem as clearly and precisely as possible. Each problem should be broken down into its smaller parts, for example, a financial problem can be broken down into the components of debt, income and expenditure. Ask yourself: What?, When?, Where?, With whom? and How often? questions to help you describe the problem in detail. Then ask yourself: What is the result of this problem?"

   2) generating solutions

   "Identify as many potential solutions as you can. At this stage, reject nothing, no matter how apparently ridiculous solutions may seem. If the problem has been broken down, write solutions for each stage."

   3) analysing strengths and weaknesses of all the potential solutions

   "List each solution's strengths and weaknesses to assess the main advantages and disadvantages of each solution. Advantages and disadvantages can refer to likelihood of success, ease or difficulty of carrying out, resources needed for example money, etc."

   4) selecting a solution to try

   "Choose a solution based on step 3. Remember to choose a solution which has a realistic chance of being successfully carried out for example choosing a solution with no funding when money is required will lead to automatic failure."

   5) planning implementation of the chosen solution

   "Many solutions require careful planning. Write down the steps required to apply your chosen solution and list resources. The steps should be specific, linked and realistic. Use the 'Four Ws' – What, When, Where, With whom - again to help plan the implementation"

   6) implementing of the chosen solution

   "Carry out the plan identified in stage 5. Record your progress in a simple diary."

   7) reviewing implementation and making further plans.

   "Regularly review how well your chosen solution is sorting out the original problem. The advantage of problem solving is that alternative options always exist. If the solution has worked, continue carrying it out. If not, go back and

choose another solution."

3. Practicing working through the steps in session.

4. Helping the patient to generalise the skill of problem solving across areas of difficulty, and outside of the therapy room.

Whilst this is a similar process to the less formal one outlined earlier, the following may be different:

- The costs and benefits of attempting to solve versus not attempting to solve the problem can be explored
- Generating solutions can be done as a 'brainstorming' process whereby the patient is invited to generate as many possible solutions as s/he can, without censoring them. Helpful questions include:
    - What have you thought about doing but dismissed?
    - What have other people suggested?
    - What would you suggest to a friend in your situation?
    - What have you tried in the past?
- When solutions are evaluated, this can be done using an explicit rating process, such as scoring each out of 5 for manageability and for helpfulness.
- Once the patient has started to use problem-solving, the therapist can help the patient to consolidate and generalise the skill by:
    - Putting together prompts or reminders of the steps to follow as a flashcard
    - Involving the patient's network in supporting problem solving by, for example, inviting them to a session in which the purpose of and steps in problem solving are shared
    - Handing over more and more responsibility to the patient for i) identifying when problem solving is needed; ii) initiating the process; iii) directing the process

List of therapy materials used in this module and/or with this technique

Problem Solving Worksheet (Appendix J)

Useful references:

D'Zurilla, T.J. & Nezu, A.M. (1982). *Problem solving therapy: A social competence approach to clinical intervention (2nd ed.)*. New York: Springer.

Martell, C.R., Addis, M.E. & Jacobson, N.S. (2001). *Depression in context: strategies for guided action* (pp.126-135). New York: W.W. Norton.

Martell, C.R., Dimidjian, S. & Herman-Dunn, R. (2010). *Behavioural Activation for depression: A clinician's guide* (pp. 109-127). New York: The Guilford Press.

d. Phase II Modular Technique:

iii) Functional Equivalence (including values) Module

d.iii) Functional Equivalence (including values) Module

Introduction and general description of the module/technique

Sometimes patients may engage in behaviours that have a clear pay-off which they value, but at the same time result in undesirable consequences. For example, Joe sometimes shouts at his partner in order to win an argument: the desirable consequence is that his partner gives in to his point of view, however an undesirable consequence is that his behaviour is ultimately damaging to their relationship. In such situations the therapist and Joe may look to find alternative behaviours that fulfil the same key function, for example a behaviour that helps Joe to put forward his point of view effectively, but that has fewer disadvantages. Such behaviours may be termed 'functionally equivalent' in that they do the same job as the original behaviour, but are substituted because they have fewer adverse costs.

Another circumstance in which therapist and patient may look to institute functionally equivalent behaviours is when the patient used to engage in particular "antidepressant" activities that were positively reinforced, but is no longer able to engage in these behaviours. For example, Clive derived great enjoyment and satisfaction from his hobby of sailing. However his current financial circumstances mean that he is no longer able to take part in this activity. Using the notion of functional equivalence, his therapist may help him to identify activities that are currently available to him that might bring about some of the same benefits as sailing did.

The module/technique in detail

When to look for functionally equivalent behaviours

Therapists and patients use the concept of functional equivalence very frequently throughout BA work, whether or not this is acknowledged. For example, during activity scheduling therapist and patient will be involved in conversations about which 'antidepressant' activities can be scheduled in, based upon what is known about what works for that patient. When some of the original activities are not possible, the search for alternatives that fulfil the same role is a search for functionally equivalent behaviours.

When patients have identified TRAPs and have started to explore alternatives to avoidant behaviour, therapist and patient often look for new behaviours that will have some of the benefits of the old behaviour, but with fewer medium to long term costs. Thus helping patients to identify and institute functionally equivalent behaviours is not limited to this particular module: it can occur at any point throughout BA.

However, this module may be particularly relevant if your patient is struggling with either of the issues outlined in the previous section, namely if he or she:

- Is 'stuck' in repeating an ultimately unhelpful behaviour because of the benefits it brings.
- Is finding it difficult to increase levels of antidepressant behaviours because circumstances prevent him or her engaging in those that worked in the past.

Using the idea of Functional Equivalence when working with 'unhelpful' behaviours

The first step is to conduct a functional analysis of times when the behaviour in question appears. This will bring to light potential triggers of the behaviour, and importantly the short and long term consequences. These consequences may be in terms of the effect on mood, physical state, cognition, or changes in the external world, for example, changes in other people's behaviour. When exploring potential consequences the following questions may be helpful:

- What are the benefits of doing X in this situation?
- You have told me that doing X causes you problems, but that you find you keep doing it. That suggests that there is probably some sort of pay-off from doing it, even if it doesn't seem like it now. What do you think it might be?
- When you start doing X, where are you hoping or expecting it will get you?
- If you didn't do X anymore, what problems would this cause?
- What are the costs of doing X in this situation?
- You have told me that doing X can be really helpful for you, but are there any downsides?
- If you didn't do X anymore, would there be any positive consequences?

If the patient wishes to change the behaviour, the process is then essentially one of problem solving. The next step is to explore potential alternatives that will bring the same or similar benefits but with fewer costs. For example, in Joe's situation he might generate ideas about different ways to get his point across to his partner, other than shouting. The problem solving module gives tips on supporting patients in generating alternative behaviours, for example asking him what has worked in the past, what he has thought about trying, and so on. The rumination module gives suggestions about possible functions and alternatives for rumination.

The patient then chooses a preferred option, following discussion about the feasibility and likely consequences of ideas raised. This option is implemented as part of homework, and the consequences reviewed.

Using the idea of Functional Equivalence when increasing positively reinforced behaviours

Very often, people with depression are in contexts where previously positively reinforced behaviours are no longer possible, for example because of the loss of a job or a relationship, or changes in financial circumstances or physical health and mobility. In such instances, the task of the therapist is to help the patient find out what it was about his or her past activities that worked. Understanding this is the key to helping the patient discover alternative activities that are most likely to be rewarding. Replacing past activities with new ones that merely look the same is less likely to be successful.

For example, to say to Clive, who used to enjoy sailing, "what about going on a boat trip?" without knowing what it was about sailing that he particularly liked may ignore some important alternative possibilities. On further discussion Clive may reveal that it was the contact with nature that he particularly liked, or the fact he was absorbed in a difficult physical task, or the exercise sailing provides, or the status of being someone who is seen to own a boat. Each of these suggests a different set of alternative activities.

Some useful questions:

- What was it about X that you particularly liked?
- When you stopped doing X, what did you miss most about it?
- People might enjoy doing X for different reasons. For you, what were the reasons you did X?

At this point it may be helpful to have an explicit conversation about what the patient values. Coming up with an abstract set of values can be used as a way of searching out new activities that are in line with these values. This process is described in the section below.

Similarly to the process outlined in the previous section, the next step is to explore alternative behaviours. Useful questions might include:

- We have spoken about some of the things you liked about X. Are there any other things you have done that have brought you any of these benefits?
- We've spoken about how it's not possible for you to do X anymore in the same way you used to. Is there some way you can do some version of X that brings you some of the benefits it did?
- What are you already doing that brings you some of the things you used to get from X?

Once alternative behaviours are identified, we then encourage the patient to schedule in one or more of these, and we review the impact of doing them at the next session. Importantly, as well as the general impact of doing these and what was learned about the activity, the therapist should ask about the extent to which engaging in the new behaviour brought about some of the sort of positive consequences associated with the old behaviour.

Exercises with patients associated with the module/technique

<u>Identifying Values</u>

Step 1: What are values?
When trying to schedule in positively reinforced behaviours the therapist might introduce the idea of values by looking for themes in the patient's past and present 'rewarding' activities, for example: "you have mentioned a few things that felt important and meaningful for you to do, such as sailing, teaching art, and playing the guitar in a band. What do those things say about what really matters to you? About what you value most in life?" Alternatively or additionally the therapist might explicitly introduce the concept of values, for example "Often we find that the activities that are the most rewarding are those that are in line with our values."

Therapist and patient might then go on to agree what a value is. In terms of how these are seen in the current approach, values are what give meaning to our lives and to our actions: they are what we consider to be important to us. Examples of values are honesty, responsibility, curiosity, closeness, and many more. Values are different from goals: a goal is something you aim towards, whilst a value is a

direction that you travel in. Whilst you can succeed or fail in attaining a goal, for example going to the gym twice a week all year, saving £500 by Christmas, you cannot fully achieve or fail at a value, because acting in accordance with a value such as honesty is an ongoing process which is sometimes easier and sometimes harder. All you can say is that you are moving in the direction of the value, or not. A useful metaphor here is that of traveling east – you can always head in that direction, even if you get diverted, yet you never actually get to 'East'.

It can also be helpful to note the relationship between values and depression. From a BA perspective, this would be viewed as follows. Often people feel most fulfilled when they act in ways that are in line with their values. One view of depression is that we become more vulnerable to it when we end up acting in ways that are removed from what we really value. There are lots of reasons why this might happen, for example, other people's expectations, fear of failing or of feeling bad. However, the end result is that much of what we spend our time doing doesn't feel meaningful to us. Extending the metaphor above of travelling east, depression is like a big mountain range that appears in front of us – suddenly travelling east becomes much harder. It is still possible, but it will need small steps, and it might be necessary to keep checking we are going in the right direction.

Step 2: what are your values?
This may have emerged from the previous conversation. If not, the patient could be asked directly to think of some examples of values a person might hold, saying whether or not they would apply to them. It can be important with some patients to determine whether the values mentioned feel valuable to them, or whether they represent only values imposed upon them by others.

Step 3: What are you already doing that is in line with your values?
Sometimes a discussion about values can be disheartening for someone with depression as it can be a reminder about what has been lost or 'failed' at, or it may imply that some huge change of behaviour is required. Therefore, it can be valuable to look at how the patient is already living according to his or her values every day. These acts may not be large, for example a patient who values being adventurous might have suggested a new café to meet a friend in. A patient who values being close to family might have spent an extra five minutes reading a story to his son in the morning.

Step 4: how can you include more 'valued' activities in your life?
Having identified some key values, the patient can then use this 'direction of travel' to work out some activities that fit in with it. These can be considered as potential anti-depressant behaviours and scheduled in. We can then review the effect on mood and other outcomes of attempting the behaviour. It is important to remember that because values are abstract and not limited to a particular activity, even if one activity fails or is not possible it is still possible to find other ways of living in accordance with a value.

Further applications of values work:

1. The notion of valued activity can be used to help find alternatives to avoidance behaviours, in other words to build TRAC from TRAP. For

example, Jenny might have a TRAP in which, after breakfast, she finds herself alone at home with nothing to do, knowing everyone else is going to work (trigger). She feels sad and ashamed (emotional response) and in response she watches daytime TV (avoidance behaviour), which distracts her temporarily but does not 'solve' the problem. This leads her to feel more ashamed in the longer term when she reflects on what she has done with her day. In this instance it is difficult for Jenny to solve the primary problem in that she wants to work but has had no success in finding a job despite trying hard. She continues to work towards this goal but cannot do it every hour of every day. What should she do as an alternative? One possibility is for her to consider activities that are in line with her values. These may be things that have been positively reinforced in the past, or may be new activities.

2. Responding to setbacks and "failures"

   Even when we end up acting out of line with our values, we can still respond to this situation in a way that fits them. For example, Raj values being close to his family. Therefore he sets himself the goal of being home from work once a week in time to have dinner with his children and put them to bed. One day he finds he cannot make it because of work commitments. Whilst he has not met his goal for that week, he can still act in line with his value. He does this by calling up his family in advance, apologising and arranging to be home early another night, an agreement he sticks to. Therefore, when a patient reports that they have 'failed' in living according to their values it can be helpful to ask: "how might you respond to this situation in a way that fits with the value of X?"; "Can you resolve this situation in a way that shows you value of: being close to your family; honesty; looking after the environment?"

List of therapy materials used in this module and/or with this technique

Functional Analysis ABC Sheet (Appendix C)

TRAP & TRAC Worksheet (Appendix H)

Useful references:
ACT text

d. Phase II Modular Technique:

iv) Anxiety Module

d.iv) Anxiety Module

Introduction and general description of the module/technique

Mixed anxiety and depression is much more common than depression alone. Anxiety is likely to be a problem that will require attention at some point, particularly when the patient engages with the environment. This issue should have been identified through assessment and during phase 1 of BA treatment. If a problem has been identified it is appropriate to reach an agreement at review session 7 to work on the problem during phase 2.

The rationale for attending to anxiety in BA is a process that will be familiar to both the therapist and the patient by this point, as it will have been used previously to deal with depressive avoidance. We use the familiar functional analysis via TRAP and TRAC sheets. We use the information gathered about anxiety and apply the TRAP system to consider the short and long term consequence of associated avoidance which maintains anxiety. From here TRAC can be used to explore changes in behaviour that will help the person activate. This in turn should facilitate positive reinforcement, encouraging future 'outside in' behaviour to overcome the anxiety. This is an ongoing and gradual process. The goal of BA in this study is to treat depression but using the same approach can also help with anxiety. This shared understanding is used to instil hope that change is possible using the BA model where anxiety blocks changing depressed behaviour.

Key elements that underpin the BA approach to anxiety are:

- Anxiety can occur to a person for a number of reasons and build up slowly
- The way we try to cope with feelings by trying to escape or avoid them can often result in ongoing problems with anxiety in exactly the same way as depression. This is by a process of negative reinforcement which maintains avoidance.
- Using the same gradual step by step approach to changing the coping behaviours that we have learnt for depression, we can also break the cycle of anxiety
- The BA approach aims to make such changes collaboratively, learn from what we see and gradually emerge from a depressed cycle. Sometimes we also need to break this cycle for anxiety

The module/technique in detail

Step 1.

The first step to engaging the person in the BA approach to anxiety is to complete a functional analysis of the problem. At this point you should identify an example of a situation, preferably from scheduling records, over the past week where it seems anxiety has blocked an 'outside in' behaviour. You as a therapist will have been thinking about how this fits with the TRAP/TRAC structure and the BA cycle. This is important as we aim to keep BA simple and provide the patient the same structure to understand their problems and how to plan to address them. Firstly, we provide an overall description of how you plan to address anxiety in BA such as:

"*As we have discussed this treatment is behavioural in nature, which means that we will work toward changing your behaviour as a method for improving your thoughts, mood, and overall quality of life. This can work just as well for anxiety if we apply the same principles. We have developed some understanding of the current situation you are in and you have been able to start to make changes in order to move forward. We call this working from* ***'the outside in'*** *rather than the '****inside out'****. We have used the TRAP and TRAC sheets and seen how the short term relief you get by avoiding can result in longer term difficulties which in turn keep you stuck in depression. The same principle applies with anxiety, when faced with a situation the discomfort you feel such as* [recap the symptoms the patient has disclosed] *is relieved when you escape. This relief feels better than the anxiety, hence you will escape more and also then begin to avoid the situation. This can be a problem if the situation is one that you need to overcome to break your cycle of depression. How does that sound? Can we use a TRAP form now to understand in more detail a specific situation."*

The aim of this manual is not to put words in your mouth but to guide you. You can see from the above example the aim is to give a general explanation.

Step 2

The next step is to tailor this to the person using the TRAP form and information gathered therein. The role of therapy is to develop a shared understanding using this approach and then work out the most productive way to make changes. The process should be a collaborative discussion.

An example of a TRAP sheet regarding anxiety is outlined below

Trigger: What situation, activity, or thinking occurred?

Going to the library to get some books to read, I opened the door and it was very busy

---

Response: What was my response to the trigger? (What did I do or feel?)

I felt overwhelmed, my heart started beating fast, I was scared to look at anyone and just wanted to get out

---

Avoidance-
Pattern: What did I do to stop my discomfort?

I left the situation without my books and went home and had a cup of tea.

What are the activities that seemed difficult or painful to do?

Stay in the library choose my books and speak to the librarian at the desk

---

In what way was by behaviour immediately effective in stopping my discomfort?

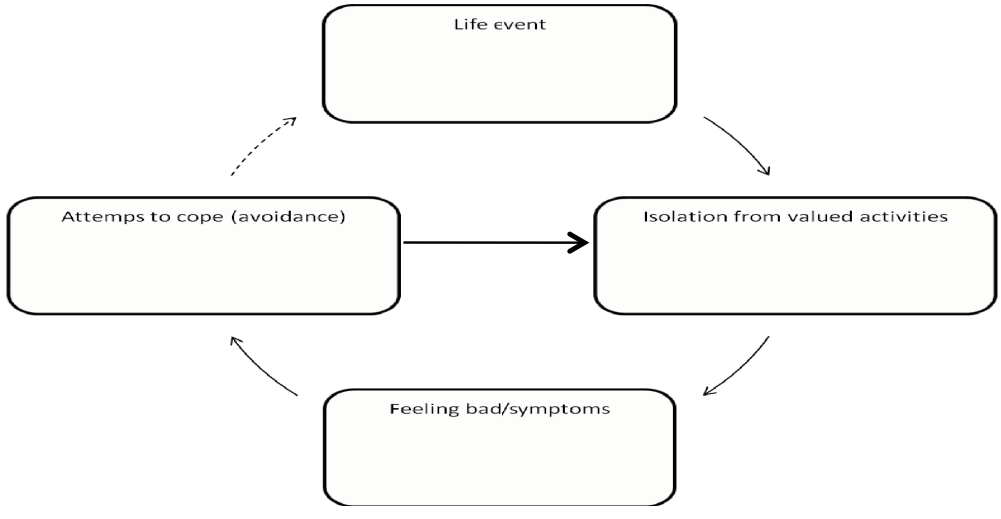
As I left my heart slowed down and I stopped worrying about what people might say to me or what I might say to them. I felt relief

What are possible long-term consequences of my behaviour?

I like reading but cannot afford to buy books, the library is a place I might be able to meet like minded people

After doing the above activity (or inactivity) am I **MORE** or **LESS** depressed? *(circle which)*

Later in the day I felt worse, I thought I will never get past this and went to bed, lying thinking about my problems



Then go on to review your shared rationale and how this TRAP fits in the attempts to cope box, maintaining the isolation from valued activities.

Step 3

The next step, as used previously in changing depressed avoidance is to use the TRAC form to plan to make changes. When dealing with anxiety remember these golden rules in planning behaviour change. Any changes should be:

- Graded: start with easier behaviours that the person feels they can manage.
- Sustained: the aim is to get used to the situation so the person has to be able to stay long enough for this to happen.
- Repeated: once is rarely enough, as per the above point the aim is to get used to the situation.
- Focussed: it may feel right to try to distract from the situation that a person is in but this will impact negatively on their ability to get used to the situation.

Check out again the person's understanding of this rationale and complete a TRAP form derived from the TRAP you have identified (see example below). Build this into scheduling and agree to review at the next session. Check the patient has understood the content and how the same approach is used for anxiety and depression in BA.

Step 4

Review the changed behaviour and what happened. Consider this in the BA cycle and if it could be built up, what would the potential benefits be.

Trigger: What situation, activity or thinking occurred?

Going to the library to get some books to read opened the door and was very busy

---

Response: What was my normal response?

I felt overwhelmed, my heart started beating fast, I was scared to look at anyone and just wanted to get out

Alternative:

Coping: What new activity can I try?
Plan to go at a quiet time and sit and read for 30 mins before leaving to get used to being there before going back on a Saturday

When will I do it?
At 11 am on Tuesday, Wednesday and Friday as these are quiet times.

How will I do it?
(break into small steps)
I will go in at 11 and pick a book to read,
I will make sure I sit facing the room and look around regularly.
I will say goodbye to the librarian before I leave

In what way may this help me over time?

It will help me get used to going in there and build up my confidence the librarians will get to recognise me.,

How does it help me break out of TRAP?

I want to be a member of the library and join the book club. I have wanted to do this for a while but not had the energy or confidence to do so. This will help build my social circles and confidence and I enjoyed reading in the past.

Trouble shooting

- *The patient cannot identify a specific anxiety situation.*
  Look in the diary at times where they have avoided situations and use this as a discussion. Ask what led them to raise anxiety as a problem and to specify when it is worse or better, in those times what are the fears they have?

- *The patient cannot break down into small steps.*
  Help out and think about if the large anxiety can be split into smaller sections. If it is not possible with the situation think of another easier one to practice on first.

- *The patient does not feel this approach will work.*
  Explore if what they are doing now is working, from a collaborative standpoint. It probably is in short term for the anxiety, but explore the longer term impact on anxiety and the focus of this treatment, depression. Have an open discussion about the pros and cons of working on anxiety and what is there to lose.

Exercises with patients associated with the module/technique

TRAP and TRAC exercises; ABC.

List of therapy materials used in this module and/or with this technique

TRAP & TRAC Worksheet (Appendix H)
Anxiety Cycle Template (Appendix K)

d. Phase II Modular Technique:

v) Punishment Module

d.v) Punishment Module

Introduction and general description of the module/technique

Behavioural activation involves reintroducing behaviours that used to be reinforced when the person was not depressed or finding alternative behaviours that may serve the same function for a person. One difficulty that occurs in treatment is that a person may try to reintroduce a behaviour that s/he once found easy or enjoyable, but that now the activity is experienced as very difficult and unrewarding.

An example would be a person who used to enjoy meeting up once a week with friends for coffee, but who has not done this for some months because of her low mood. As a between-session task she tries to go out for coffee with her friends as she used to. However, she reports in the next session that she felt uncomfortable all the time she was there, that she ended up saying very little, and she thought her friends would all have enjoyed it more if she had not come along. She mentioned that she ended up making an excuse to leave early, and afterwards she spent some time ruminating about how bad her situation was because she couldn't even do something as simple as meet up with her friends. She has cancelled her next meeting with her friends.

What happened here and more generally in these types of situation can be understood in behavioural terms. A behaviour that in one context was rewarded is in another context punished. As with any behaviour that is punished, behaviour theory predicts that the activity will reduce in frequency.

This section provides some guidance on how to deal with this type of situation. The suggested strategies that can be used also draw on behavioural principles. One important principle that features several times here is that short-term rewards tend to control behaviour more than long-term rewards. In other words, an immediate consequence of a behaviour is likely to have much more influence on whether that behaviour occurs again, than a consequence that occurs a long time after the behaviour.

This basic behavioural principle can be used to help understand lots of behaviours, such as why a person who is trying to diet may, when hungry, eat a very fatty and sugary snack. The instant reward of the unhealthy but pleasurable treat exerts more control over the behaviour of eating the snack than the longer-term consequence of dieting which is losing weight. Another example is why people continue to overindulge in drinking alcohol despite the experience of hangovers the next morning. Here, the short-term effect of feeling relaxed and happy outweighs the long-term result of the hangover in the morning. This basic behavioural principle, of the controlling effect of short-term rewards, known as contingencies, can be used to understand the clinical situation that is the focus of this section. We can use this principle to structure the intervention so that the therapist and patient can work together to deal with this scheduling difficulty.

As with other phase II modular techniques, there is no expectation that the strategies described in this section will be used with every participant. They should be used if the difficulty described above occurs during activity scheduling.

The strategies will be used predominantly as 'session specific therapeutic content' in phase II sessions. However, if this emerges as a significant difficulty earlier in treatment it may be necessary to introduce at least some of the techniques earlier. If this additional module is covered in detail during phase II it will also be necessary to review this work during the later stages of therapy. Clinical judgement will be required in determining when to introduce the strategies outlined here and how long to spend on them.

The module/technique in detail

If a person reports that previously enjoyed behaviours are now punishing we should use this module. However, the therapist should carry out a number of therapeutic behaviours themselves before introducing the rationale for the additional module.

- Empathise: demonstrate empathy and understanding for the difficulty the patient found with the activity scheduling (for example, 'It sounds like that was really difficult for you.')
- Reinforce the behaviour: provide reinforcement for the attempt to try out the activity (for example, 'Although it was really difficult for you, it's really good to see that you had a shot at doing it.')
- Normalise: make it clear to the patient that this difficulty often occurs in this type of treatment (for example, 'This type of thing quite often happens at some point during this type of treatment.')
- Expectancy of change: emphasise that although the patient found it difficult, there are specific things you and the patient can work on together to help deal with this difficulty; the difficulty is surmountable (for example, 'Shall we have a think about how we might be able to deal with this?)

The therapist must make a clinical judgement about how much time needs to be devoted to these preliminary therapeutic tasks before moving on to introduce the rationale for this module, but often they can all be achieved in a few sentences seamlessly interwoven into the review of the between-session tasks.

Introducing the rationale for this module
Discuss with the patient how it looks like s/he found some of the activity scheduling difficult this week. Use a collaborative approach to find out whether the patient thinks it would be useful to spend some time working on this in the session.

T: 'It looks like you had a really good go at meeting up with your friends, but it turned out to be difficult.'
C: 'The thing is that I used to find it really enjoyable, but I didn't enjoy any of it. It was awful.'
T: 'Would it help if we spent sometime during this session trying to get our head around what was going on, and what we might be able to do about it to help?'

Identification of specific issue to be addressed

The specific issue that is addressed in this module is that an activity was experienced as aversive, difficult and so on even though in the past the same activity was something that was enjoyable, straightforward or rewarding in some way.

Identification of personal examples of the specific issue
This difficulty may have occurred over several weeks and several activities. Use an open-ended questioning style to encourage the patient to identify several examples. Ask if s/he can think of other examples unrelated to the formal scheduling in which an activity that is easy or enjoyable when not depressed has come to feel very difficult or aversive when depressed.

Information giving about specific issues and module techniques
Re-emphasise that this is a very common difficulty in depression. Discuss how there are several strategies that may be able to help here.

Apply functional analysis
Use standard functional analysis techniques described elsewhere in this manual as your basic approach here. Conduct a functional analysis of one or more of the difficult situations.

One aim of the functional analysis is to gain an understanding of how the behaviour is now being punished. It is possible, even likely, that the behaviour is being punished in more than one way. Try to identify the different punishing consequences of the behaviour. It may also help to discuss how this contrasts with how the behaviour is reinforced when the person is not feeling low.

An additional aim is to help the patient understand the consequences of the punishment, i.e. that the behaviour is likely to decrease, and how this can then be understood in TRAP-TRAC terms, just like many other examples you may already have discussed. If the behaviour is punished it is likely to reduce. This may lead to avoidance coping in which a short-term gain, for example, reduction of unpleasant feelings, is at the expense of a longer-term gain, for example engaging in activities that are needed to help improve mood.

If the functional analysis identifies that one of the reasons the person is not finding the behaviour rewarding is the presence of rumination or not fully engaging with the experience, it may be necessary to consider using strategies from the rumination module.

Exercises with patients associated with the module technique

Once a connection is made that this situation may well be understood as a specific example of a more general phenomenon of avoidance coping, the patient may be able to generate strategies that could be applied here that s/he has used with other avoidance behaviours.

These may include:

- Remembering the basic BA principle of experimenting with a behaviour long enough to see what its impact is over the longer term rather than abandoning a behaviour too soon
- Breaking the activity up into smaller, more manageable sections

Additional strategies that it may be useful to try:

Detailed planning of the activity in the session
One strategy is to plan in great detail the particular activity that the participant will try out. This will include planning in detail exactly when, where, with whom etc. the person will try out the activity. If these are not clearly specified well in advance, the decision to disengage in a difficult behaviour may be made as a result of the short-term consequence occurring. If this is the case, then the potential short-term reward of not performing the behaviour, for example, feelings of relief, removal of anxiety, may exert more control over the behaviour than the longer-term benefit of doing the activity such as feeling less depressed in the long-run. However, if a decision to engage in a particular behaviour is made well in advance, the advantage of the short-term avoidance in controlling the behaviour is reduced.

If it is difficult to achieve this level of specification in the session, other strategies may be to encourage the person to write down the night before very specific plans for the next day, particularly if there is diurnal mood variation where the person feels very low in the morning, but less low in the evening. Again, this may help overcome the controlling effect of short-term rewards controlling behaviour the next day.

Pair an immediate reward with the currently punishing consequence
As discussed above, if a particular activity is being punished in the short-term it may reduce even if there is a long-term benefit to the behaviour. Another strategy to overcome the controlling effect of the short-term punishing contingency is to pair an immediate reward with the activity to compete with the punishing consequence. For example, the person who found it difficult to meet up with friends could reward herself immediately after completing the activity by doing something in town that she finds easy and enjoyable, such as meeting up with her partner to go to the cinema. Selecting the reward may require some discussion with the patient. The principles here are to ensure that the reward can be delivered feasibly and immediately and will be experienced as sufficiently rewarding to counteract the immediate punishment that may have occurred.

Identify a functionally equivalent but easier to achieve behaviour as a stepping stone
If the patient finds the idea of trying a particular activity again very difficult, because of how punishing it was in previous activity scheduling, it may be worth trying to identify a 'functionally equivalent' behaviour. A functionally equivalent behaviour is one that would have the same intended reinforcement as the behaviour that is found to be very difficult at the moment. For example, the person who found going along to the coffee shop very distressing may not want to repeat the behaviour next week. If the intended consequence is to gain pleasure from social interaction, then it may be worth working with the patient to find other behaviours that would have the equivalent function of obtaining social interaction, but that s/he would be more willing to try. For example, while the patient may not want to go to the coffee shop in the next week she may be willing to phone one of the friends to meet up. If this is

achievable, the therapist and patient can work on moving towards the goal of going to the coffee shop in subsequent sessions.

This should not necessarily be a first line strategy, because it can feed into avoidance. However, if the patient is unwilling to try a behaviour again, then thinking in terms of functionally equivalent behaviours and seeing these as a stepping stone to the more difficult behaviours may be a useful option. There is more detail on this type of strategy in the functional equivalence module.

Planning further activities
Use the strategies discussed in the session to generate specific activities for the following week.

List of therapy materials used in this module and/or with this technique

Activity Planning Tool (Appendix G)

d. Phase II Modular Technique:

vi) Communication Module

d.vi) Communication Module

Introduction and general description of the module/technique

Interpersonal concerns, and specifically, communication difficulties underlie many behavioural activation problems. Sometimes they are a TRAP/TRAC in their own right, at other times they are a barrier to achieving behavioural TRACs. For example, a patient may have a self-care goal/TRAC but is struggling to achieve it because s/he needs their partner to help watch the children during the times s/he wants to implement the self-care activity.

This module is premised on the principle that improving communication helps improve support, a key factor associated with mental well-being. It focuses on keeping strategies idiographic – that is, finding communication strategies that work for the patient in the context(s) they are in. This module does not adopt ideas that there is a right or wrong way to behave interpersonally, for example, in an 'assertive' way. Communication TRACs are patient led – the therapist should work with the patient so that s/he generates their own solutions.

It is important to understand interpersonal behaviours in the context of core BA principles. We all do behaviours for a reason. At one point they may have worked, but they may not be working in this context. Also, we must work to be concrete. It is easy to get abstract very quickly with interpersonal concerns. Stick with understanding specific, concrete behaviours.

Look for conversational patterns – for example, patterns of avoiding communication, particular types of conflict or misunderstanding. Although most of the 'work' will be done on specific conversations, if you pick those that are representative of a pattern of behaving, then you will have a bigger impact.

The module/technique in detail

<u>Step 1: Help participant to gain an understanding of support needs, both instrumental and emotional, and the way that communication contributes to difficulties in support</u>

Modify the monitoring sheet to focus on interpersonal situations and links with mood. This can be done in several ways:

- Prospectively – each day ask patients to record interpersonal events alongside their mood. For patients who identify interpersonal concerns as significant and want to work on this module, another way to accomplish this task is to have the participant record their best or worst moment each day. These will often be interpersonal in nature.
- Prospectively – ask patients to identify interpersonal goals, for example areas they want to improve on interpersonally, then ask them to record instances related to goals and related mood during the week.
- Retrospectively – review monitoring logs for instances that are interpersonal in nature. Examine what interpersonal behaviours were engaged in or not.

Hints:

- It's important to look as much for what is not there as what is there. Do not just look for conflict. Look for a failure to do behaviours that might otherwise be expected, for example, partner comes home, patient is exhausted after a day with the children. Partner says, "where's dinner?" and then sits down. The patient continues to get on with caring for their children and making dinner. The main problem recorded on monitoring sheet is an argument with one of the children over bath time. In fact the real problem is lack of support from partner.
    - Look for situations where the two individuals in the problem situation may have different expectations or desired outcomes for the situation. They may not speak about it, thus there may not be overt conflict, but there may be covert conflict. It can be useful to ask, "what did you want from the situation? What did the other person, to the best of your knowledge, want from the situation."
- Do not necessarily take assertions such as "*my partner/family member/friend is great. We have a fabulous relationship. S/he is a really wonderful partner*" at face value. Look for unbalanced descriptions. 'All great' may be a sign that things are in fact not so. Often there are two things that may underlie a "s/he is great" description – (1) concerns about admitting to self that things are not great and what the implications this may have for the relationship, (2) social prescriptions about how to speak about one's partner/family (this may take some trust/rapport building).

<u>Step 2: Use an interpersonal monitoring chart to identify interpersonal or communication TRAPS</u>

The idea in this step is to narrow the interpersonal problem down to difficulties with communication and to identify specific communication problems.

TRAP – Triggers, Response, Avoidance Pattern
Triggers: I needed to ask my husband whether he could do the bedtime routine on his own once a week so I could go swimming.
Response Worried, Frustrated, Isolated, Low. Worried about what he might say
Avoidance Pattern Silence! I could not bring myself to ask him
Consequences short term: I felt relieved I did not have to have the conversation at first. Then I just felt really frustrated with myself. Long term: Feels like I am never going to be able to make changes and get some life back for me. This makes me feel very isolated and low.

<u>Step 3: Communication analysis</u>
Primary concept: breaking down communication. It is important to be concrete and understand the specific factors contributing to poor communication. Hint: ask the patient to describe the situation as if you were a fly on the wall, or as if it was a movie transcript. For example, a mother who would like her ex-partner help her with childcare.
"*I phoned him up and said that I needed him to take Daniel one night this week. He said that he couldn't as he's busy all week and taking him this weekend. I couldn't believe how selfish he was being and told him so.*"
What this conversation looks like after breaking it down more:

- Marie: *Hi. I need you to take Daniel this Wednesday evening*.

- Ex-husband: *I can't this week as I have a late work meeting and won't be home until gone eight.*
- Marie: *Look, I really need some support and a break here*
- Ex-husband: *I really can't this Wednesday. I am having him at the weekend so you can get a break then*
- Marie: *I do really need some time here – you are being really unhelpful*
- Ex-husband: *Marie, I really can't. Also, this is a really bad time. I am just about to go into a meeting. Plus I am taking him at the weekend.*
- Marie: *You really are selfish. Every time I talk to you I am reminded about just how selfish you are*.
  Slams down phone.

Hint: this often takes a considerable amount of time. Plan for 20 minutes.

Step 4: Getting on communication TRAC

Conversation planner: help patient get back on TRAC with communication.

- Building communication confidence: starting with manageable communication changes. Questions to ask: Can you get it done? - Is the conversation manageable? - Do you need to break down the conversation further? Hint, if the situation is quite tricky, it may be a good idea to try out new conversational patterns with a 'safer' person and then working up to the target individual. If someone else was in my situation, what would they request? How would I feel if someone asked this from me?
- Ask the person to examine their TRAP and ask, "*what did you want from the situation?"* The aim is help the individual achieve their goals in a way that works for both them and the other person. This is quite important as many depressed individuals worry that if they ask for something for themselves they will be over riding the needs of the other individual.

THE FOLLOWING SECTION WILL BE AMENDED

- Often question B can get quite abstract. Use the goal pyramid (see below) to assist you and the patient in breaking down the goal to something that is concrete and achievable.
- Use conversation planner to generate specific goals for the conversation and to plan the context in which the conversation might occur.
- Use TRAC model to plan out moving the TRAP to TRAC.
- Role play new behaviour, allowing for at least ten minutes.
- Plan for contingencies.

Exercises with patients associated with the module/technique

List of therapy materials used in this module and/or with this technique

Self-Monitoring Record Form (Appendix D)

TRAP & TRAC Worksheet (Appendix H)

d. Phase II Modular Technique:

vii) Alcohol and Substance Use Module

d.vii) Alcohol and Substance Use Module

Introduction and general description of the module/technique

This section is designed to give a brief introduction into the management of alcohol or substance use in the COBRA trial. It is not designed to cover in detail the issues associated with the use of such substances. Those deemed to have dependency should have been screened out of the study at baseline assessment. It is of note however that people with depression may often use alcohol or non-prescribed drugs for a number of reasons, both positive and negative, in a way that is consistent with our behavioural understanding. All actions will have a consequence; if we understand the relationship between the action and the consequence, short and long term we will be able to intervene as necessary. We must note that BA is a collaborative treatment; there must be a shared understanding that the alcohol/substance constitutes a problem that the person wished to alter. This is consistent with the motivational interviewing approach that describes states of change as pre-contemplation, contemplation, action and relapse. Further details of MI are not included in this section but can be accessed and discussed in supervision. Our focus in this treatment is to use the stages of BA of self-monitoring, functional assessment goal setting and scheduling to help the person move through these MI stages to action that places them in touch with positive reinforcement in their environment. These issues should be discussed in supervision.

The module/technique in detail

Step 1: Draw links between alcohol and substance use and problems in activation/mood.

Primarily this is an extension of the use of the self-monitoring diary. If there is a suspicion that these problems are present this should be discussed in an open way and linked back to the BA rationale. This allows the person to consider the relationship between mood states/movement towards goals and their use of alcohol/drugs.

"It seems that on occasions you have reported that you were drinking alcohol, I wonder how much you are drinking on an average week. Are we able to look at this on your self monitoring forms?"

This is used collaboratively to allow the person to consider the issue and contemplate to what degree it is a problem and if they wish to address it.

Step 2: Use functional analysis to consider the relationship between the alcohol/substance use and consequence

When a situation has been identified it is important to consider it with the person in an open way to explore the consequence it has. At this point it is important not to appear judgemental or prescriptive.
"OK last week we discussed the degree to which you use alcohol and how helpful/unhelpful this was for us as we try to help you manage your depression. You were going to keep a record of when you drank over the past week, how have you

found that? When you look at the form do you notice any relationships with your mood?"

Followed up by:

"Perhaps we can look at this in more detail now, I would like to consider your drinking like the other behaviours we have looked at in treatment, that is to be open and consider the consequences, both good and bad, and how they relate to your overall goal. We can use the same structure we have used before"

At this point an ABC form can be used, this is preferable to a TRAP (although it may be possible to move on to use a TRAP/TRAC approach) as the consequence cannot always be seen as avoidance.

Antecedent: Cue to the drinking behaviour

Behaviour: Drink

Consequence: Escape from painful feelings (negative reinforcement of drinking)
Get a buzz; engage with social circles (positive reinforcement)

If negatively reinforced avoidance is the clear consequence of drinking/substance use then it is possible to move forward and use TRAP/TRAC. If the consequence is drinking is positively reinforced it is advised to look at the longer term consequence, such as feeling lethargic and stay in bed the next day. This is the related back to rationale cycle and treatment goals.

This stage again works with the person to contemplate changes to be made.

<u>Step 3: Identify new behaviours to be tried at risk times and schedule these in diary</u>

This moves to an action stage, and the scheduling follows the same stages as outlined earlier in this section. Remember behaviours should be specific and clear and collaboratively set.

It is of note that we see new behaviours that are useful as those that move the person towards their goals and provide positive reinforcement. This is experimental and it is important we are open and evaluate the consequences of any new behaviours in subsequent sessions.

Exercises with patients associated with the module/technique

As we are viewing these problems as the same as other problematic behaviours discussed throughout this manual there are no new exercises to be added. The flexible use of self-monitoring, functional assessment and scheduling are exercises that will have already been repeatedly used in clinical sessions. It is important we use the same approach applied consistently using the same exercises to allow the participant to view their drinking/substance use behaviour in this way and not add undue complication to the BA treatment.

List of therapy materials used in this module and/or with this technique

Self-Monitoring Record Form (Appendix D)

Functional Analysis ABC Sheet (Appendix C)

TRAP & TRAC Worksheet (Appendix H)

Activity Planning Tool (Appendix G)

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11. Appendices: Clinical Tools

Appendix A: BA Assessment Worksheet

What is main problem (can you describe to me the main problem that brings you to see me)?

When will this problem occur (are there any particular patterns to this, day/month particular triggers to worsening, any times you note when you feel a little better)?

Where will it occur/feels worse (are there any particular places home, outside, *get specific;* any times you note you feel a little better)?

With whom (does anyone, or type of people have an impact on the problem, anyone make you feel better, explain how)?

What are the worries that go through your mind when you are feeling this way?

Frequency of fluctuations

Range of intensity of feelings linked to above (use a scale)

Duration (of symptoms, how long would fluctuations last)

Excesses (behaviours the sufferer has increased to cope with the problem, e.g. taking phone of hook, shopping at quiet times, using alcohol, sleeping more etc)

Avoidance (what is now avoided in order to cope such as work, socialising etc)

Functional Analysis of problem (use recent situation to get a detailed picture, you are looking for the behavioural responses to a surge in depressive symptoms, and the consequence of that)

	Autonomic symptoms	Behavioural symptoms	Cognitive symptoms
Antecedent			
Behaviour			
Consequence			

Impact of problem (look for impact on the way the person is able to interact with their world, social, family, daily activities, etc and previous positive reinforcing activities)

Onset (Any key event that occurred around the time of onset that may be linked in a change to engaging with world)

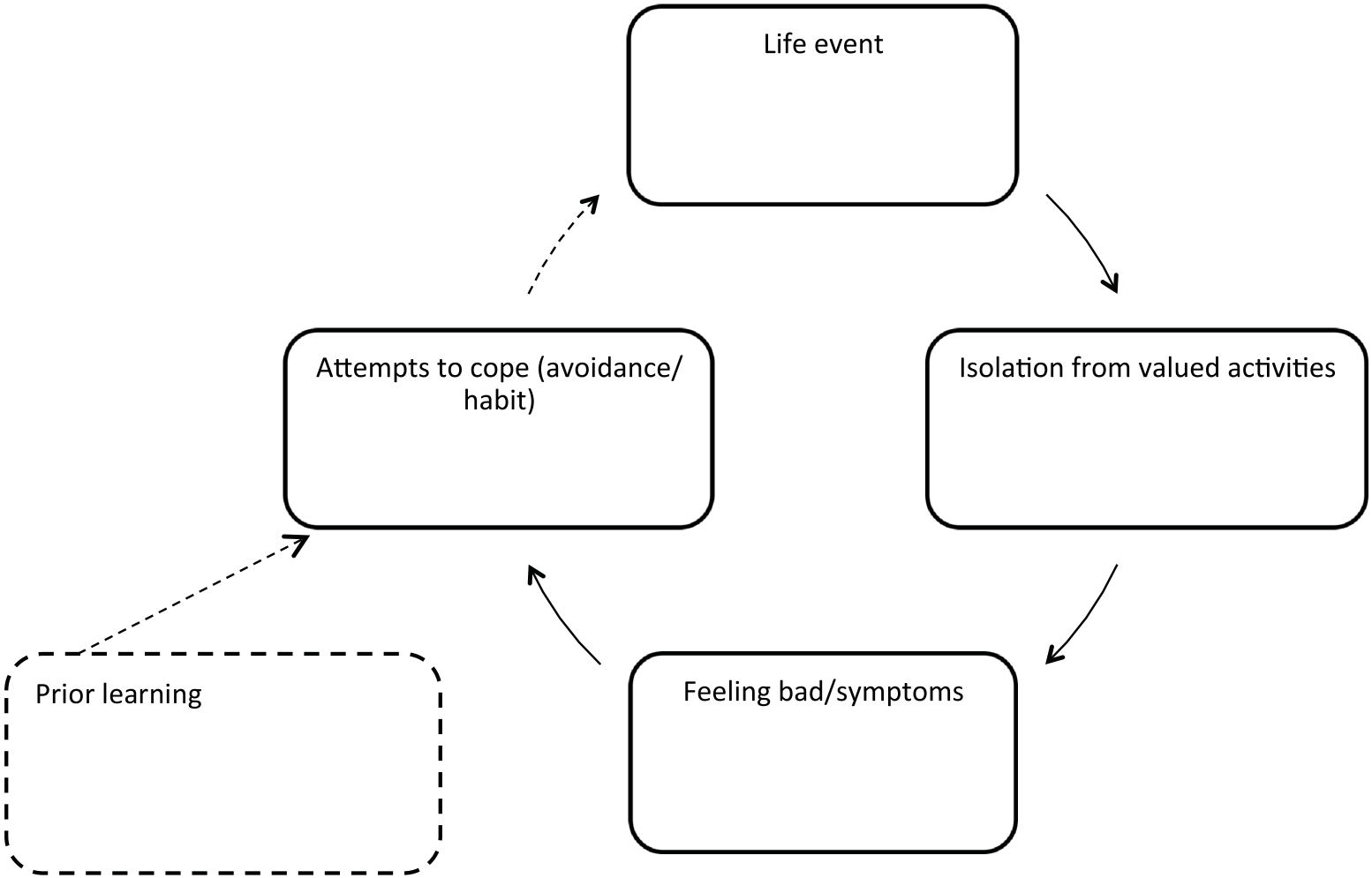
Fluctuations

Previous treatment for this problem/other psychological difficulties

Check use of alcohol or drugs

Risk assessment (ask about suicide, thoughts, any intent, plans, previous attempts etc)

Appendix B: Formulation Diagram



Appendix C: Functional Analysis ABC Sheet

Antecedent	
Behaviour	
Consequence	

Appendix D: Self-Monitoring Record Form

In each box write the activities you engaged in during the hour, and how you felt. Rate your feeling on a scale of 1 to 10, with 1 being the least intensity of feeling and 10 being the most.	
Time:	**Day and Date:**
Midnight	
Mood	
1:00 A.M.	
Mood	
2:00 A.M.	
Mood	
3:00 A.M.	
Mood	
4:00 A.M.	
Mood	
5:00 A.M.	
Mood	
6:00 A.M.	
Mood	
7:00 A.M.	
Mood	
8:00 A.M.	
Mood	
9:00 A.M.	
Mood	
10:00 A.M.	

Mood	
11:00 A.M.	
Mood	
Noon	
Mood	
1:00 P.M.	
Mood	
2:00 P.M.	
Mood	
3:00 P.M.	
Mood	
4:00 P.M.	
Mood	
5:00 P.M.	
Mood	
6:00 P.M.	
Mood	
7:00 P.M.	
Mood	
8:00 P.M.	
Mood	
9:00 P.M.	
Mood	
10:00 P.M.	

Mood	
11:00 P.M.	
Mood	

Appendix E: Goals Sheet

Please write down some of the things you would like to be doing that are currently hard to achieve. These goals will help you plan your treatment with your therapist. They will be most useful if they are specific, realistic activities and if they are things that are important to you, reflecting your life values.

Goals

Goal 1

Goal 2

Goal 3

Goal 4

On the scale below please rate the current percentage success you have in attempting to achieve your goals **regularly without difficulty**:

0 ---------- 1 ---------- 2 ---------- 3 ---------- 4 ---------- 5 ---------- 6 ---------- 7 ---------- 8

No success 25% success 50% success 75% success complete success

Appendix F: Valued Activities Worksheet

Write down your routine activities here:
e.g. cleaning, cooking, shopping etc.

Write down your pleasurable activities here:
e.g. going out/visiting friends or family

Write down your necessary activities here:
e.g. paying bills etc.

Appendix G: Activity Planning Tool

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
AM 6-7							
7-8							
8-9							
9-10							
10-11							
11-12							
PM 12-1							
1-2							

2-3							
3-4							
4-5							
5-6							
6-7							
7-8							
8-9							
9-10							
10-11							
11-12							

Appendix H: TRAP & TRAC Worksheet

Trigger: What situation, activity, or thinking occurred?

Response: What was my response to the trigger? (What did I do or feel?)

Avoidance-**P**attern: What did I do to stop my discomfort?

What are the activities that seemed difficult or that I was unable to do?

In what way was by behaviour immediately effective in stopping my discomfort?

What are possible long-term consequences of my behaviour?

After doing the above activity (or inactivity) am I **MORE** or **LESS** depressed? *(circle which)*

What change in my behaviour can I try in order to break out of the **"TRAP"**?

When will I try this behaviour?

Outcome (after trying new behaviour):

Trigger: What situation, activity or thinking occurred?

Response: What was my normal response?

Alternative:
Coping: What new activity can I try?

When will I do it?

How will I do it?
(break into small steps)

In what way may this help me over time?

How does it help me break out of TRAP?

Appendix I: Rumination Monitoring Form

During the week identify situations where you find yourself turning over thoughts in your mind. Use the spaces below to see where this occurs, what the content is and how this makes you feel/what you do as a result. In the next session your therapist will look at this with you and together you can discuss how this may be impacting on your depression.

Situation	Rumination	Consequence

Appendix J: Problem Solving Worksheet

Problem:

Goal(s):

Solutions:

a)	**a) Pros (+)**	**a) Cons (-)**
b)	**b) Pros (+)**	**b) Cons (-)**
c)	**c) Pros (+)**	**c) Cons (-)**
d)	**d) Pros (+)**	**d) Cons (-)**

Choice of solution:

Steps to achieve solution (homework):

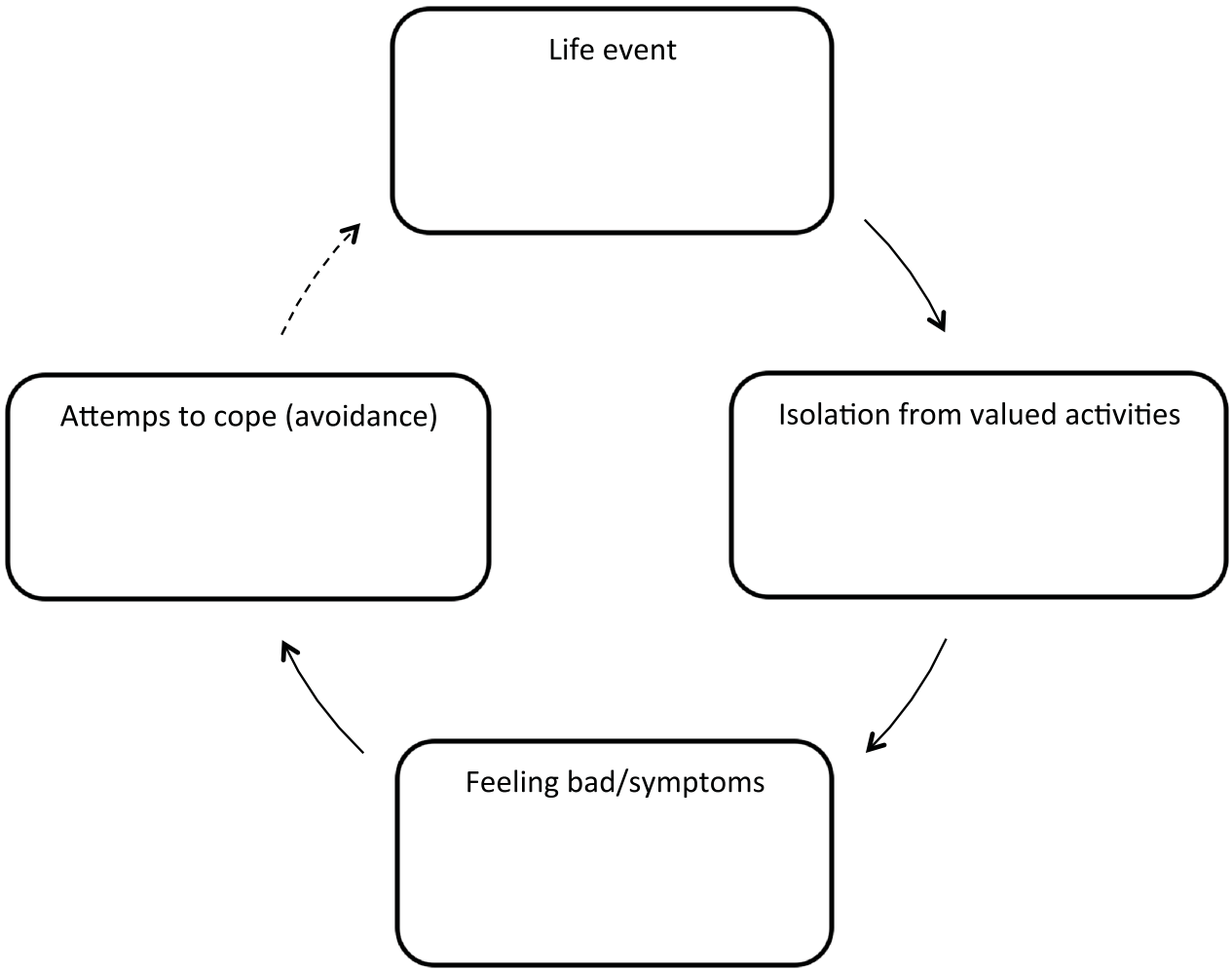
a)

b)

c)

d)

Appendix K: Anxiety Cycle Template



Appendix L: Relapse Prevention Worksheet

What are 5 signs my depression is getting worse? *Be specific, e.g. I have avoided social engagements more than twice in a week; I have woke early getting stuck with ruminations 3 times in past week.*
What are 5 steps you can take to help yourself when you notice the above?

COBRA Trial CBT Protocol

Clinical Practice Manual

COBRA Trial Behavioural Activation Protocol
Clinical Practice Manual

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