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**Brief Cognitive Therapy for Panic Disorder in Adolescents:
Clinician Manual and Session-by-Session Guide**

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2 Introduction

2.1 Panic disorder in adolescents

People who have panic disorder experience repeated, unexpected panic attacks, which involve an abrupt onset of intense fear or discomfort that reaches a peak within minutes and includes symptoms such as increased heart rate, light-headedness and shaking (American Psychiatric Association, 2013). Nearly a quarter of adults with panic disorder report that their panic disorder began before the age of 18 years (Solmi et al., 2022). Panic disorder occurs in around 1-3% of adolescents aged 11-19 years of age in the UK (Sadler et al., 2018). While younger children may have panic *attacks*, panic disorder is rare among this age group (e.g., 0.0% of 5-10 year olds in the Mental Health of Children and Young People Survey met diagnostic criteria for panic disorder; Sadler et al., 2018).

2.2 Current evidence for this approach

2.2.1 Brief cognitive therapy for adults with panic disorder

This treatment is adapted from brief cognitive therapy for panic disorder developed for adults (Clark et al., 1999). In adults, brief cognitive therapy involving self-study modules and 5 sessions (plus two booster sessions) of therapy (B-CT) did not differ significantly from the full 12 session (plus two booster sessions) treatment (F-CT) immediately or at 12-month follow up (panic-free at post-treatment: F-CT 79%, B-CT 71%; 12-month follow-up: F-CT 71%, B-CT 79%). There were large effect sizes for both the full and brief treatments on a measure of panic symptoms from pre- to post-treatment and pre- to 12-month follow-up (post-treatment: F-CT $d=2.9$, B-CT $d=2.9$; 12-month follow-up: F-CT $d=2.8$, B-CT $d=3.2$). Both treatments were also significantly more effective than a waitlist control in reducing panic symptoms on a range of measures (all effect sizes were large with Cohen's d ranging from 1.35-2.98).

2.2.2 Brief cognitive therapy for adolescents with panic disorder

The adolescent version of this treatment was developed with patient and public involvement (PPI) at all stages and has been evaluated through a feasibility study comparing brief cognitive therapy to a general form of cognitive behaviour therapy (CBT) (Waite, 2022; Waite et al., In preparation). This study included 34 young people with panic disorder as a primary ($n=30$; 88%) or secondary problem ($n=4$; 12%). There were high levels of co-morbidity in the sample with other anxiety disorders, most notably social anxiety disorder ($n=21$; 62%). Nine percent ($n=3$) of the sample also met criteria for major depressive disorder. The study did not include young people with an established autistic spectrum disorder, learning disabilities, suicidal intent, or recurrent or potentially life-limiting self-harm (i.e., current frequency of at least once per week or self-harm that requires medical attention), those identified by social services as currently 'at risk' (e.g., due to child protection concerns), or on psychotropic medication. Clinicians were all low-intensity practitioners (i.e., Children's Wellbeing Practitioners or Psychological Wellbeing Practitioners). This study demonstrated that for the sixteen young people randomised to receive brief cognitive therapy, the treatment was highly effective (with a large effect size; $d=1.96$), with *all* the young people showing reliable change at the 3-month follow-up assessment. The general form of CBT was also effective, with an effect size that was large ($d=1.29$) but lower than brief cognitive therapy. There were no serious adverse events in the trial and qualitative interviews indicated that both treatments were acceptable.

3 How to use this manual

This manual, along with all the materials you will need to deliver cognitive therapy, can be downloaded from the Oxford Centre for Anxiety Disorders and Trauma (OxCADAT) website: <https://oxcadatresources.com>. You will need to register to login before you can access them. All materials are free of charge.

4 Overview of this treatment

This is a brief cognitive treatment for panic disorder in adolescents, adapted from the treatment developed by Professor David Clark and colleagues (Clark, 1996; Clark et al., 1994; Clark et al., 1999). As outlined in the cognitive therapy manual for the treatment of panic disorder in adults (Clark & Salkovskis, 2009), the treatment is underpinned by Clark's (1986) cognitive model of panic, which suggests that the individual tends to misinterpret bodily sensations (which are typically associated with normal anxiety responses) in a catastrophic manner (i.e., as a sign of an impending physical or mental disaster). Two processes appear to maintain these distorted beliefs. Firstly, because of the belief that sensations may be dangerous, the person becomes hypervigilant for sensations and repeatedly scans their body looking for sign that there is something wrong. Through this internal focus, they then notice (normal) sensations that other people are often not aware of and mistakenly take these as evidence to support the negative beliefs. Secondly, these negative interpretations are further maintained by safety-seeking behaviours ('safety behaviours') as the non-occurrence of the catastrophe can be attributed to the safety behaviour rather than the fact that the catastrophe would not have actually occurred. In addition, some of the safety behaviours can amplify the feared sensations. For example, responding to feeling short of breath by breathing deeply can make the feelings of shortness of breath more marked and lead to feeling dizzy. Similarly, for someone who is worried about going mad or losing their mind, trying to push upsetting thoughts out of their mind tends to make the thoughts more likely to occur.

Cognitive therapy, therefore, aims to correct the young person's negative beliefs about their panic-related bodily sensations. The main goals of treatment are to help them to identify their catastrophic interpretations of bodily sensations, generate alternative non-catastrophic interpretations and test the validity of catastrophic and non-catastrophic interpretations through discussion and behavioural experiments.

The brief form of treatment consists of five sessions and two booster sessions (over the following three months), with accompanying self-study workbooks and worksheets. Sessions are delivered by a therapist directly to the young person. Although the treatment was initially designed to be delivered in person, it can also be delivered remotely (e.g., using video conferencing software such as Microsoft Teams or Zoom).

A variety of procedures described in Clark and Salkovskis' (2009) manual are used to reverse key maintaining factors identified in Clark's (1986) cognitive model of panic disorder. These procedures are introduced in the four workbooks. Prior to each of the first four sessions, the young person reads a workbook and completes the written exercises and homework activities outlined in the workbook. These workbooks have been adapted to be suitable for adolescents, with patient and public involvement (PPI), e.g., changing the case studies from adults to young people, changes to the language and metaphors to be developmentally appropriate, and adding graphics to make them visually appealing. Additional handouts dealing with common catastrophic thought (e.g., '*I'll faint*' or '*I'll lose control*') may also be used if relevant to the young person's concerns. In the session, the therapist discusses the workbook with the young person and clarifies any misunderstandings. The focus of the session is then on undertaking experiential exercises in which bodily sensations and

safety behaviours are systematically manipulated to demonstrate their adverse effects, as well as behavioural experiments in which the young person tests pre-specified negative predictions while dropping their safety behaviours. Process self-report measures are used in sessions to generate meaningful behavioural experiments. This differs to other cognitive-behavioural treatments in that a habituation rationale is not used, repeated exposure to the same situations not encouraged, and the individual is not encouraged to develop and use positive self-talk before or during behavioural experiments.

At the beginning of treatment, parents/carers are given a workbook that explains the principles underlying the treatment approach, what their child will be doing in therapy and how they can support them in treatment. Parents/carers are asked to support their child in completing the workbooks each week and carrying out behavioural experiments (or other relevant activities) between sessions. The therapist also liaises with school at assessment and throughout therapy where necessary to support the young person in treatment.

5 Who is this treatment for?

This treatment is for adolescents aged 11-18 years with panic disorder (which may be primary or secondary to another difficulty). If secondary, it is important that there is agreement by the young person that this should be the focus of treatment at this point. The young person must be willing to engage in the treatment. If there are co-occurring conditions, it must be judged that they are not likely to interfere with treatment delivery, especially given the brief nature of the treatment. For example, levels of risk should not be so high that significant proportions of the sessions are likely to need to focus on risk assessment and management. It is important to note that, at this stage, we have not made any adaptations or evaluated the treatment for young autistic people. If the young person has a co-morbid medical condition (such as asthma, epilepsy, or cardiovascular disease), the young person's GP must have been consulted and given the opinion that this will not interfere with treatment delivery. Finally, the young person must be able to understand the written materials (currently only available in the English language).

6 Who should it be delivered by?

This treatment is designed to be delivered by clinicians with training and experience in cognitive behaviour therapy. Clinicians should have demonstrated competences in delivering CBT for anxiety in accordance with the competence framework for CBT with depression and anxiety (Roth & Pilling, 2007) and in working with children and young people in accordance with the competence framework for child and adolescent mental health services (Roth, Calder, & Pilling, 2011). Links to these frameworks are provided in the Appendices (section 37).

7 Training in the approach

Prior to delivering the treatment, clinicians and supervisors should have read the Clark and Salkovskis (2009) treatment manual and watched videos of training in cognitive therapy for adults with panic disorder delivered by Professor David Clark and others with expertise in the approach (these can be found on the OxCADAT website). This training provides an understanding of the key procedures involved in therapy and includes role-plays (with actors) demonstrating key therapeutic techniques. There are also generic and specific therapy competences for panic disorder, provided within the competence framework for the delivery of cognitive and behavioural therapy (Roth & Pilling, 2007).

Competency in delivering this treatment to young people should be assessed using the Cognitive Therapy for Panic Disorder in Adolescents: Checklist of Therapist Competency (Clark & Waite, 2023), adapted from Clark, Salkovskis, Hackman, and Grey (2002), downloadable from the OxCADAT website.

8 Supervision

Supervisors should have experience in delivering this treatment in their clinical practice. In addition to the competences required for clinicians, supervisors should have demonstrated competences in supervision in accordance with the competence framework for supervision (Roth & Pilling, 2015).

Prior to beginning treatment, supervision should be used to ensure that the difficulties the young person is experiencing are consistent with panic disorder, as outlined in DSM-5 (see assessment section). Once therapy is underway, supervision should enable the clinician to practice specific clinical skills and where possible, incorporate direct observation (e.g., through videos of clinical sessions) into supervision.

The young person's self-report measures (of symptoms and processes, such as cognitions) should always be used to guide the discussion of cases in supervision. Particular attention should be paid to ensure that the treatment delivered remains consistent with this approach (e.g., the testing of beliefs through behavioural experiments, rather than anxiety habituation). Supervision should also be used to ensure that behavioural experiments are conducted in all sessions (including outside the therapy room) and between sessions by the young person with support from their parent/carer as required.

9 Assessment of panic disorder in adolescents

9.1 Screening for panic disorder

To identify young people who may have panic disorder, we suggest asking the young person four brief screening questions (these questions can also be found in the Appendices in section 31.1).

	Yes/No
1. Have you recently been experiencing panic attacks? A panic attack involves a sudden surge of intense fear that reaches a peak within minutes and involves 4 or more of the following sensations or fears: a pounding heart, sweating, trembling/shaking, shortness of breath, feelings of choking, chest pain, nausea, feeling dizzy/faint, chills/feeling hot, numbness/tingling, feelings of unreality or feeling detached from yourself, fears of losing control, going crazy or dying.	
2. During the panic attacks, have you had any of these kinds of worries: a. There was something seriously wrong with you (e.g., you might collapse, stop breathing or die)? (or) b. That you were going to lose control or go crazy? (or) c. That you would look silly or embarrass yourself?	
3. Have you either: a. Worried about having further panic attacks (or) b. Changed your behaviour to avoid further panic attacks?	
4. Would you like help with dealing with your panic attacks?	

If a young person responds 'yes' to all items on the screening questions, and indicates that they would like help, we recommend further assessment for panic disorder. For question 2, if the young person *only* responds 'yes' to a worry that they would look silly or embarrass themselves, this may be more indicative of social anxiety (see section 10.3 for further information). However, if there is any level of uncertainty, we would recommend further assessment of panic symptoms.

9.2 The use of diagnostic assessment

To meet DSM-5 diagnostic criteria for panic disorder (code F41.0) (American Psychiatric Association, 2013), an individual must experience:

- A. Recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four (or more) of the following symptoms occur:

(Note: the abrupt surge can occur from a calm state or an anxious state)

1. Palpitations or a pounding heart
2. Sweating
3. Trembling or shaking
4. Sensations of shortness of breath or smothering
5. Feelings of choking
6. Chest pain or discomfort
7. Nausea or abdominal distress
8. Feeling dizzy, unsteady, lightheaded, or faint
9. Chills or heat sensations
10. Numbness or tingling sensations ('parasthesias')
11. Feelings of unreality (derealisation) or being detached from oneself (depersonalisation)
12. Fear of losing control or 'going crazy'
13. Fear of dying

- B. At least one of the attacks has been followed by one month (or more) of one or both of the following:
- a. Persistent concern or worry about additional panic attacks or their consequences (e.g., losing control, having a heart attack, 'going crazy').
 - b. A significant maladaptive change in behaviour related to the attacks (e.g., behaviours designed to avoid having panic attacks, such as avoidance of exercise or unfamiliar situations).

- C. The disturbance is not attributable to the physiological effects of a substance or another medical condition.

- D. The disturbance is not better explained by another mental disorder.

These criteria can be found in the Appendix (section 31.2).

We recommend carrying out a diagnostic assessment of panic disorder and other common mental health difficulties. In adolescents, panic disorder commonly co-occurs with other anxiety disorders; for example, in our recent study of adolescents with panic disorder (Waite et al., In preparation), 62% also experienced social anxiety disorder, 44% had agoraphobia and 32% had generalised anxiety disorder.

Therefore, a diagnostic assessment will enable the clinician to:

- Determine whether the young person meets diagnostic criteria for panic disorder and other commonly occurring mental health difficulties.
- Better understand the nature of the difficulties (e.g., specific symptoms) and how they are related.
- Identify whether panic disorder is the main presenting problem.
- Obtain information that can inform decision-making around the focus of treatment.

We recommend using a validated diagnostic assessment tool, e.g., the Anxiety Disorders Interview Schedule (ADIS-C/P; Silverman & Albano, 1996) to assess for the presence of anxiety disorders, depression and behavioural disorders. Ideally the interview should be conducted with the young people and their parent/carer, each interviewed separately. Assessors conducting the diagnostic assessment should be trained in its use and have a demonstrated high level of inter-rater reliability.

Please note that DSM-5 specifies that panic attacks must be ‘recurrent’ (i.e., occurring often or repeatedly) but does not specify the frequency of panic attacks for a diagnosis of panic disorder. This treatment was developed for people who are currently experiencing panic attacks. If a young person has not recently experienced a panic attack and agoraphobic avoidance appears to be the main difficulty, then a different treatment approach may be needed initially that targets the agoraphobia (i.e., for the young person to increase going out of the house or to places they have been avoiding).

9.3 Differential diagnosis

9.3.1 Physical health conditions

In many cases, the young person’s physical symptoms will have already been investigated to determine whether they reflect an underlying health condition or could be better explained by panic disorder. Young people may have been assessed by their GP or by specialists (e.g., in Accident & Emergency or Cardiology departments).

The results of assessments may indicate that the symptoms reflect panic disorder rather than a physical health condition. In other cases, the young person may have a physical health condition *and* panic disorder. In these instances, the GP/specialists will be able to advise around whether it is safe to proceed with cognitive therapy. We would typically contact the GP via telephone to explain the treatment and get their advice.

If the young person has not had a medical assessment, it may be helpful to request that they are assessed by their GP before proceeding with treatment. The following examples are common health conditions that may have overlapping symptoms. However, this is not an exhaustive list.

9.3.1.1 Asthma

Asthma is a common lung condition that causes occasional breathing difficulties and often starts in childhood. The main symptoms of asthma are a whistling sound when breathing (wheezing), breathlessness, a tight chest, which may feel like a band is tightening around it, and coughing (National Health Service, 2021b). The difficulties in breathing can lead to hyperventilation, which is responsible for many of the symptoms experienced during a panic attack. Asthma attacks can occur randomly or after exposure to triggers. Common triggers are allergies (e.g., house dust mites), cold air, exercise, or infections. Around 9% of children and young people in the UK have asthma (Asthma + Lung UK, 2022).

9.3.1.2 Low blood pressure (hypotension)

Symptoms of low blood pressure include light-headedness or dizziness, feeling sick, blurred vision, generally feeling weak, confusion and fainting (National Health Service, 2020). In adults, low blood pressure is a reading of less than 90/60mmHg, however, for young people, blood pressure thresholds are based on gender, age and height percentiles (Banker, Bell, Gupta-Malhotra, & Samuels, 2016).

9.3.1.3 Postural tachycardia syndrome (PoTS)

Individuals with postural tachycardia syndrome (PoTS) or postural orthostatic tachycardia syndrome experience a very quick increase in their heart rate after getting up from sitting or lying down (and therefore symptoms improve when they lie down). Symptoms may include dizziness or light-headedness, fainting or almost fainting, heart palpitations, chest pain, shortness of breath, shaking and sweating. There may also be other symptoms, such as feeling sick, headaches and blurred or tunnel vision, weakness and fatigue, sleep, and cognitive difficulties. PoTS symptoms can be caused by other conditions, such as low blood pressure (National Health Service, 2023b). It is estimated to occur in around 7% of adolescents (Lin et al., 2014).

9.3.1.4 An irregular heart rhythm (arrhythmia)

An arrhythmia is an abnormality of the heart's rhythm, where it may beat too slowly, too quickly, or irregularly. Symptoms of arrhythmias include palpitations, feeling dizzy, fainting and being short of breath (National Health Service, 2021a). Supraventricular tachycardia (SVT) is a type of arrhythmia that can often start for the first time in children and young adults. It involves the heart suddenly beating much faster than normal and can then abruptly slow down. Symptoms can include chest pain, feel weak, breathless, or lightheaded, feeling tired, feeling or being sick. It can happen when the person is resting or doing exercise. It usually lasts for a few minutes but can sometimes last for several hours. It can be triggered by tiredness, caffeine, alcohol, or drugs – but often there is no obvious trigger. It is not usually serious, but some people may need treatment (National Health Service, 2021c). It is estimated to affect 1 in 250 children (Salerno & Seslar, 2009).

9.3.1.5 Hyperthyroidism

Hyperthyroidism, or overactive thyroid, occurs when the thyroid gland produces more thyroid hormones than the body needs. High levels of thyroid hormones in the bloodstream leads to an increase in metabolism, which then escalates many bodily functions. Symptoms can include a rapid heartbeat, feeling anxious or nervous, increased sweating, hand tremors and difficulty sleeping (National Health Service, 2023a). However, it is very rare in young people, affecting around 1 to 2 per 10,000 (NICE, 2019).

9.3.1.6 Alcohol/drugs

Drinking alcohol or taking drugs can lead to similar bodily sensations as a panic attack. For example, alcohol and cannabis can cause nausea, light-headedness/dizziness, and visual disturbance; ketamine can cause confusion, nausea, agitation and feeling disconnected from reality. Taking substances can also lead to having a panic attack, feeling anxious or depressed. When individuals who are dependent on substances suddenly cut down or stop taking the substance, withdrawal symptoms can include hand tremors, nausea, sweating, visual disturbance, restlessness, and anxiety (NHS, 2022).

9.3.2 Mental health conditions

Panic attacks can occur in the context of a range of mental health difficulties, which underscores the importance of a detailed diagnostic assessment, covering all anxiety disorders as well as other common co-morbid disorders. For a diagnosis of panic disorder, some panic attacks must be unexpected or 'out of the blue', that is, the panic attacks must *not* be predictable (e.g., always occurring at a specific time, in the presence of a predictable trigger). This differs to other anxiety disorders (e.g., a specific phobia) where there is greater predictability about panic attacks occurring in certain situations.

It is common for people to meet diagnostic criteria for other anxiety disorders, as well as panic disorder. Therefore, it will be necessary to establish that both panic disorder and the other disorder are present and that the symptoms are not better accounted for by another disorder. If co-occurring, it will be important to understand the development of the comorbid diagnosis and its functional relationship to panic disorder.

The following sections provide guidance around how to determine whether another disorder may be better understood as panic disorder (however again please note, this is not an exhaustive list and panic disorder can co-occur with a range of mental health difficulties).

9.3.2.1 Social anxiety disorder

It is common for panic disorder to have socially evaluative elements (e.g., concerns that other people will judge them negatively while having a panic attack), especially amongst adolescents. It can be helpful to explore whether panic attacks ever occur in non-social situations (e.g., that do not involve their peers), and to look at responses on measures, such as the adapted Agoraphobia Cognitions Questionnaire to see if any of the feared consequences of a panic attack are non-social (e.g., that they are seriously ill or could die). If panic attacks *only* occur in social situations and the anticipation of such situations, and the fears are only or predominantly related to embarrassment or humiliation rather than a catastrophic misinterpretation of bodily sensations, this may fit better with social anxiety disorder.

9.3.2.2 Vomit phobia

In panic disorder it is common for young people to worry about being sick. However, young people who experience panic attacks in the context of a vomit phobia (rather than panic disorder), tend to misinterpret bodily sensations as an indication of imminent vomiting and their predominant worry or concern is around being sick (rather than various imminent catastrophes, such as passing out or suffocating). Panic attacks tend to occur in response to real or imagined nauseants rather than occurring unexpectedly. Young people are likely to avoid real or imagined nauseants, external cues that resemble vomit/vomiting, and/or suppress memories, thoughts or images associated with vomit/vomiting (rather than places or situations thought to trigger panic attacks). Safety behaviours are generally aimed at reducing the likelihood and/or severity of vomiting and/or bodily sensations interpreted as an indication of imminent vomiting. Whereas in panic disorder, safety behaviours are typically intended to reduce the likelihood and/or severity of panic attacks.

9.3.2.3 Agoraphobia

In panic disorder, it is common for there to be marked fear and avoidance of situations that are feared and avoided in agoraphobia (i.e., public transport, open or enclosed spaces, being in a queue or crowd or being outside of the home alone). However, in agoraphobia, the situations are avoided because of thoughts that escape may be difficult or help not available were they to become panicky

or experience incapacitating or embarrassing symptoms rather than concerns around having a panic attack or the consequences of a panic attack (e.g., losing control or dying).

9.3.2.4 Depression

If a young person is depressed and having panic attacks, it is important to look at the time course of the two. If they report experiencing panic attacks and a marked fear of such attacks before they became depressed, they are likely to have primary panic disorder, in addition to depression. If they only developed panic attacks after they became depressed, and the panic attacks are absent in any periods when they are not depressed, the panic attacks are secondary to depression and likely to go away with effective treatment of depression.

9.4 Self-report questionnaire measures

Self-report questionnaires are crucial at the initial assessment and throughout treatment.

9.4.1 Symptoms of panic disorder

We suggest using the Panic Disorder Severity Scale for Children and Adolescents (PDSS-C) (Elkins, Gallo, Pincus, & Comer, 2015; Shear et al., 2006) prior to each session to assess change in the frequency and severity of the young person's panic disorder symptoms and anticipatory anxiety and associated agoraphobia, avoidance, fear, work and social impairments. There are seven items, with each rated on a 0-4 scale, with a higher score indicated greater severity. Scores can range from 0 to 28. It has been shown to have good psychometric properties with an adolescent population (Elkins et al., 2015). However, there are currently no clinical cut-offs for adolescents (in adults, the clinical cut-off is a score of 8 or more and reliable change indicated by a change in score of 5 or more).

There is also a panic disorder subscale in the Revised Child Anxiety and Depression Scale (RCADS; Chorpita, Yim, Moffitt, Umemoto, & Francis, 2000), which is commonly used in Child and Adolescent Mental Health services as a routine outcome measure (of symptoms of anxiety and depression). There are nine items in the panic disorder subscale, with each rated on a scale of 0 ('never') to 3 ('always'). Scores can range from 0 to 27. The subscale has good sensitivity (0.78) and specificity (0.92) to panic disorder in young people (Chorpita, Moffitt, & Gray, 2005). However, unlike the PDSS-C, the items only measure physiological anxiety symptoms and do not measure persistent concern about further panic attacks or significant change in behaviour. Clinical cut-offs vary depending on the young person's age and gender. The RCADS can be scored using spreadsheets or syntax available from the developer (<https://www.childfirst.ucla.edu/resources>).

9.4.2 Panic disorder specific process measures

Panic disorder specific measures of key maintaining factors in the cognitive model of panic disorder (bodily sensations, cognitions, safety behaviours and avoidance) are used throughout to guide treatment. These measures were originally designed for use with adults but have been adapted for use with adolescents, with patient and public involvement (PPI) input. At this point, the psychometric properties with adolescents have not yet been established. The questionnaires, information on scoring and how the measures have been adapted for young people can be found on the OxCADAT website: <https://oxcadatresources.com>. Copies can also be found in Section 31.4.

9.4.2.1 Body sensations

The adapted Body Sensations Questionnaire (BSQ) (Chambless, Caputo, Bright, & Gallagher, 1984) is a self-report measure of bodily symptoms relating to panic that an individual may experience and the level of fear they cause. This can be used to determine the degree to which participants are experiencing panic sensations. Respondents are asked to rate the level of fear they feel when

experiencing 17 different bodily sensations, on a five-point scale, from 1 ('not at all') to 5 ('extremely'). Scores can range from 17 to 85.

9.4.2.2 Panic cognitions

The adapted Agoraphobia Cognitions Questionnaire (ACQ) (Chambless et al., 1984), modified by Clark and colleagues (Clark et al., 1994) is administered prior to every session to measure cognitions associated with panic disorder. This measure includes 18 cognitions commonly associated with panic disorder. First, the respondent rates the frequency with which the thought occurred on a scale of 1 ('thought never occurs') to 5 ('thought always occurs when I am anxious'). The final frequency score is the mean score of all items and can therefore range from 1 to 5. Second, the respondent rates the extent to which the thought was believed to be true on a scale of 0 ('I do not believe this thought') to 100 ('I am completely convinced this thought is true'). The belief rating is perhaps most helpful for guiding treatment; if a thought is given a high belief rating, then it is likely to still be making the young person vulnerable to panic even if the frequency rating is quite low. The final belief score is the mean score of all items and can therefore range from 0 to 100.

9.4.2.3 Safety-seeking behaviours

The adapted Panic Safety-Seeking Behaviours Questionnaire (SBQ) (Clark & Salkovskis, 2009) is administered to identify panic related safety-seeking behaviours. This involves 16 items, each rated on a 4-point scale from 0 'never' to 3 'always'. Scores can range from 0 to 48. Ideally one would aim for a position where the young person is not using safety behaviours at the end of therapy. Sometimes a young person will become panic-free while still endorsing regular use of safety behaviours. In such instances, it is worth continuing therapy to help the person drop the safety behaviours as well to ensure a good long-term outcome.

9.4.2.4 Avoidance

The adapted Mobility Inventory (MI) (Chambless, Caputo, Jasin, Gracely, & Williams, 1985) is given as a measure of avoidance behaviour due to discomfort or anxiety. Respondents are asked to rate the amount of avoidance when they are with someone they trust (e.g., parent or friend) and when they are on their own. Items are rated on a five-point scale from 0 ('never') to 5 ('always'). In the adolescent version, they are also able to give a 'not applicable' response.

9.4.3 Symptoms of anxiety and depression

The Revised Child Anxiety and Depression Scale (RCADS; Chorpita et al., 2000) is used to measure symptoms of anxiety disorders and depression. There is also a validated version for parent/carer report. The RCADS has 47 items assessing symptoms of panic disorder, separation anxiety disorder, social anxiety disorder, generalized anxiety disorder, obsessive compulsive disorder, and major depressive disorder. Responders rate how often each item applies on a scale of 0 ('never') to 3 ('always'). The RCADS has been shown to have robust psychometric properties in children and young people from 7-18 years of age (Chorpita et al., 2005). Clinical cut-offs vary depending on the young person's age and gender. The RCADS can be scored using spreadsheets or syntax available from the developer (<https://www.childfirst.ucla.edu/resources>).

9.4.4 Therapeutic alliance

The Session Rating Scale (SRS; Duncan et al., 2003; Miller, Duncan, & Johnson, 2000) assesses key dimensions of an effective therapeutic relationship and is given at the end of each therapy session to get feedback from young people so that any issues related to therapeutic alliances can be identified and addressed. It comprises four rating scales (relationship with the therapist, goals and

topics, approach or method and an overall rating). It has well-established reliability and validity (Campbell & Hemsley, 2009; Duncan et al., 2003). Further information about this measure is available at <https://www.corc.uk.net>. Because the session rating scale is a measure of therapeutic alliance, it is preferable for the young person to complete it when the therapist is not present. For example, they could complete it when the therapist leaves the room to take copies of the materials or in the waiting room immediately after the session. Based on a total possible score of 40, any score lower than 36 overall, or 9 on any scale, could be a source of concern (Duncan et al., 2003) and therefore should be discussed with the young person so that any issues can be addressed.

9.5 Goals

The Goal Based Outcomes tool (Law & Jacob, 2015) enables the young person to set up to three goals at the beginning of treatment as a way of evaluating their progress on a Goal Progress Chart. Progress towards individual goals is then periodically rated on a scale from 0 (no progress) to 10 (goal has been reached). Although this measure is now widely used in CAMHS, its psychometric properties have not yet been established. For further information see: <https://www.corc.uk.net>.

9.6 Panic diary

Over the course of treatment, a panic diary (Clark & Salkovskis, 2009) is given to the adolescent to fill in on a daily basis to record the frequency of panic attacks, identify triggers, sensations and thoughts, and to help them to answer their panic related thoughts during an attack. At the beginning of therapy, the young person is asked just to complete the left-hand side of the diary (i.e., details of each panic attack and the negative interpretation of the sensations or thoughts of disaster, with belief ratings). From session 2 onwards, the young person is encouraged to complete the whole diary (i.e., also completing the final column with answers to the thoughts and new belief ratings).

9.7 Drawing all the information on panic together

By the end of the assessment, the clinician should have detailed information (from clinical interview, diagnostic assessment, and self-report measures), covering the following information:

- The pattern of panic attacks (including whether panic disorder is the main problem, or whether the pattern of panic is better accounted for by another diagnosis).
- Description of panic attacks, particularly, their frequency and severity, associated bodily sensations, fearful thoughts, images, and safety behaviours (including examples of recent and severe panic attacks).
- The situations and activities associated with the occurrence of panic attacks.
- Safety behaviours aimed at preventing or minimising catastrophic fears.
- Patterns of avoidance (e.g., situations and activities).
- Factors which influence the severity of panic attacks (i.e., make them easier or more difficult to manage, better or worse).
- The young person's beliefs about the problem (including the potential implications of these beliefs on their motivation for and willingness to engage in treatment).
- The attitudes/beliefs and responses of family members, peers, school staff and significant others to the problem.
- Onset and course of panic attacks.
- Current or previous investigations and treatment for panic attacks.

These points are also included in the Appendix (section 31.3).

9.8 Other important information to assess

We also recommend covering these broad areas in the clinical interview:

- Contextual information about the young person (including their family, interests, personal strengths, future aspirations).
- Risk/safeguarding issues (and management plan if any risk issues are identified).
- The use of prescribed/non-prescribed medication.
- Alcohol and drug use.
- The presence of any physical health conditions and their current treatment (see section 9.3.1).
- Presence/impact of any specific learning disabilities.
- Peer relationships (including any current and past bullying or other issues).
- School information (including whether they would like school to be contacted).
- Current or previous treatment for panic disorder or other mental health difficulties.
- The young person's willingness to engage in the treatment.

Again, these points are also included in the Appendix (section 31.3).

9.9 Liaison with medical professionals

If the young person has any co-morbid physical health conditions, it will be necessary to consult the young person's GP or others involved in their care to understand the nature of the condition and its treatment. Before going ahead with treatment, medical professionals must have given the opinion that it is safe to do so and that the condition will not interfere with treatment delivery.

10 Treatment planning

Following on from the diagnostic/clinical assessment, we suggest having a treatment planning meeting with the young person and their parent/carer to feed back the results of the assessment, collect any further information and to discuss and plan treatment.

This is an opportunity to clarify any information from the assessment, ask any additional questions and check whether anything has changed since the assessment (e.g., risk).

It is helpful to explain panic disorder and any other co-morbid difficulties to the young person and their parent/carer, including that it is very common to experience multiple kinds of anxiety difficulties.

In this appointment, the clinician should explain that:

- The treatment with the greatest evidence-base for anxiety disorders is CBT.
- Brief cognitive therapy is a form of CBT, and this treatment has been developed specifically for people with panic disorder. It has been evaluated in young people with panic disorder and shown to be effective.
- Treatment involves the young person and therapist working together as a team. While a key part of treatment involves going into situations where the young person's fears are triggered, this will always be done in way where the young person feels in control and that builds their confidence.

It is also helpful to explain that the sessions will be focused on the young person but that the parent/carer has an important role in supporting the young person through the treatment, especially in facilitating between-session activities.

At the end of this session, the clinician should give the young person Workbook 1 to take away, read and complete (along with a folder to keep all the materials from the session together). The parent/carer should also be given a copy of the 'Information for Parents, Carers and Supporters' workbook and asked to make time to read it before the first session. If there are other parents/carers who live separately, they should also receive a copy of this workbook to ensure that everyone understands the treatment approach and how they can support the young person in a consistent way. The young person should also be given a set of questionnaires to complete and bring to the first session.

It is also helpful to know if there are any other significant people that the young person would like to be involved in treatment in any way. At the beginning of treatment, we recommend having a discussion with the young person around if/how it would be helpful to involve staff from school or college. Some young people prefer not to have their school involved, whereas others find it extremely helpful. Involvement can include providing school staff with copies of the workbook for parents, carers, and supporters so they can make sense of the young person's panic attacks and understand the treatment approach.

Because this is a brief treatment, young people and parents/carers are asked to prioritise the sessions and make time for activities at other times of the week. Having and asking the young person and parent/carer to sign a therapy contract/missed appointments policy can be helpful. We would suggest booking in and writing down the five sessions before sessions begin. At the end of the session, we recommend that the young person and parent/carer are both given an SRS to complete about the session (when the therapist is not in the room) and ask for their feedback, including whether there is anything you can do to make the sessions work well.

A checklist for the treatment planning session can be found in the Appendix (section 31.5).

11 Structure and set up of therapy sessions

11.1 Overview of session structure

Session	Week	Typical Location
1	1	In clinic
2	2	In clinic
3	3	In clinic or off-site
4	4	In clinic or off-site
5	5 or 6	In clinic or off-site
Booster 1	Between session 5 and booster 2	In clinic or off-site
Booster 2	3 months after session 5	In clinic

11.2 Use of time in sessions

As this is a brief treatment, it is important to be efficient with time. The focus should be on identifying beliefs and using behavioural experiments and discussion to address them. Behavioural experiments should be conducted in most sessions to maximise learning. This means that the time spent reviewing workbooks should not be overly long – the focus should be on dealing with any difficulties and consolidating learning rather than going over the materials again. If sessions are off-site, sessions may need to be longer than an hour. However, booster sessions are typically shorter than earlier sessions.

11.3 Location of sessions

To maximise and generalise learning, it is important to undertake behavioural experiments in different situations or places that the young person has been avoiding due to panic. Prior to this, it will be important to consider any risks, take steps to deal with them and ensure that local policies (e.g., risk assessment/lone working) are followed.

The young person's responses on the adapted Mobility Inventory can be a useful source of information. Some of these places can be in the same building as the session is conducted, such as stairs, an enclosed space (e.g., a cupboard), a lift, or nearby, e.g., a local shop or café.

We find it helpful to organise one or more sessions outside the therapy room (typically from session 3 onwards). For example, shopping centres can often be a great location for a therapy session, as there are opportunities to engage in multiple activities that may trigger panic, such as being in a noisy, crowded area, speaking to people to pay for an item or order food, going in a lift or on an escalator. Using a bus, train, or other forms of public transport and going to a train/bus station for the session can be helpful. Similarly, many young people experience panic attacks at school or college and therefore, having a session at school or college can also be of benefit. A quiet public library can also be a good place to simulate an exam environment for young people who experience panic attacks in exams.

As with all behavioural experiments, it is crucial to plan these collaboratively with the young person and their parent/carer or school staff to ensure they will be acceptable and meaningful and to maximise learning from the experience.

11.4 Delivering sessions remotely

We have found that it is possible to conduct sessions remotely via video-conferencing software. As above, it will be necessary to ensure that local policies are followed to make sure that remote sessions are conducted safely, e.g., ensuring that a parent/carer or responsible adult is on hand.

Questionnaires can be sent and returned via email or completed online using a survey platform such as Qualtrics or shared securely (e.g., via Microsoft Teams) in accordance with the service's procedures and policies for processing personal data. If questionnaires have not been returned in advance of the session, they can be shared on the screen in the session. Similarly, other materials, such as workbooks, behavioural experiment sheets and the therapy blueprint can also be emailed or posted and shared on the screen.

Behavioural experiments can be undertaken remotely just as you would in an in-person session. If the experiment involves leaving the room, it can work well to have the session on a smartphone rather than laptop (potentially switching from video to audio if in a public space). As with in-person sessions, the therapist will still be modelling and completing behavioural experiments with the young person over the remote link. For example, if the young person has a belief that they will stop breathing and suffocate if they do not control their breathing, the therapist may suggest an experiment where they both try and stop themselves from breathing by holding their breath for as long as they can (see worksheet 'How do I know I won't stop breathing and suffocate if I don't control my breathing?' for further details). The therapist would normally start the experiment before the young person, so that the young person can observe and replicate what the therapist is doing and what happens (i.e., that rather than suffocating, the body's automatic reflex kicks in and forces them to take a breath).

It can be more difficult to detect how the person is feeling and what they are doing in a remote session. Consequently, the therapist may need to ask about what sensations they are experiencing and any safety behaviours they are undertaking more than they normally would in-person. Further guidance about delivering cognitive therapy for panic disorder (The Oxford Centre for Anxiety Disorders and Trauma, 2020) can be found on the OxCADAT website.

12 Working with parents/carers

Parents/carers are given the booklet 'Information for Parents, Carers and Supporters' at the beginning of treatment so they learn more about the treatment approach and understand how to support their child in therapy, particularly around carrying out between session activities. If the young person agrees, parents/carers can find it helpful to join the therapy session at the end so they can learn what the young person did in the session, what they learned and the plan for between-session activities. At the end of treatment, it can also be helpful to involve them in the therapy blueprint, so they are clear about the plan following the end of treatment and how they can support their child.

If parental beliefs and behaviours are identified as having a role in the maintenance of the problem, it may be helpful to bring the parent into the session, particularly in undertaking behavioural experiments, so that (a) the therapist can model how they could respond when the young person is anxious, (b) the parent/carer can see that the young person is able to cope with anxiety and benefit from the learning that comes from doing the experiment and (c) the therapist can get further information about the parent's beliefs/behaviours. Socratic questioning, modelling, and behavioural experiments can all be used with the parent/carer to address these beliefs and test out alternative behaviours. However, given that this is a brief treatment, the focus will be on working with the young person.

13 Working with school staff

Some young people have difficulty attending school due to their panic attacks. In these instances, it will be important to begin sessions outside the school environment and then work towards the young person attending school when they feel more confident about how to manage their panic symptoms. It will be important to ensure that school staff are on board with new ways of managing panic symptoms. As well as providing a copy of the workbook for parents, carers, and supporters, it is likely to be helpful to meet with school staff to explain the treatment approach, how staff can support the young person, and develop a plan around reintegration. The plan should be made collaboratively with the young person and include any staff who have contact with the young person when they are feeling panicky, such as teachers, support/pastoral staff and staff based in reception.

Other young people may be regularly attending school but have difficulties attending or remaining in lessons due to their panic attacks. Ultimately, the aim will be for the young person to attend and remain in lessons, dropping any safety behaviours, when they are feeling panicky. However, this may not be possible early on and therefore again, it will be important to have a plan for how school staff help the young person to manage their panic attacks in ways that are acceptable to the young person and that do not inadvertently make the problem worse. For example, for a young person who worries that bodily sensations such as feeling light-headed and dizzy in a panic attack are a sign that they are about to faint, once they understand the cognitive model and that the problem is about their belief that they are going to faint, it will be important that school staff *do not* reinforce this belief, e.g., by getting the young person to sit with their head between their legs or lie on the floor.

Where a young person frequently experiences panic attacks at school, it may be helpful to have one or more sessions at school and/or to plan meaningful school-based behavioural experiments (e.g., in the canteen or walking down a busy corridor). For school-based sessions, it can work well to book a room for the session and for the young person to plan the experiments with the therapist, conduct the experiments beyond the room without the therapist present (as this is likely to cause embarrassment to the young person) and then to come back to the room to debrief afterwards.

14 Materials for the sessions

The following materials are needed for the therapy sessions:

- Questionnaires (symptoms and process measures)
- Goal progress sheet
- Panic diary
- Session rating scale
- Workbooks for young person (sessions 1-3)
- Additional worksheets for specific beliefs
- Behavioural experiments sheet
- Therapy blueprint (session 5)
- Flashcards
- Video/audio recorder

It can also be helpful to have spare copies of materials that may have already been given out at the treatment planning session (e.g., Workbook 1 and the workbook for parents, carers, and supporters) in case further copies are required.

Checklists for every session are provided in the Appendix (sections 31.6 to 31.12) and include what materials are needed for the session. All materials can be downloaded from the OxCADAT website.

14.1 Questionnaires

Questionnaires are given to the young person at the end of the session to take away, complete and bring back to the next session. All questionnaires should directly inform clinical work and therefore at the outset, it will be important to explain the reason for completing each questionnaire and how it will be used in treatment (Law, Jones, & Wolpert, 2015).

In each clinical session, clinicians should spend time at the beginning of the session reviewing the questionnaire responses with the young person, alongside other clinical information. Questionnaires should also be reviewed in supervision to guide discussion and treatment planning.

The process measures will help the therapist and the young person to understand what is happening when they experience a panic attack, in terms of the feared bodily sensations, the cognitions associated with these sensations and the safety behaviours that they undertake to try to deal with the problem. Typically, the cognitions follow logically through from the sensations. For example, when an individual experiences light-headedness, they often think they are going to fall over and pass out, and because of this, may hold onto something, or sit down to try to reduce the chances of this happening. Similarly, feeling unreal often leads an individual to become concerned that they are losing control of their mind and they try to get control of their thought or leave the situation to try to reduce the sensations and beliefs.

Therefore, the questionnaires measuring these processes (Body Sensations Questionnaire – adapted; the Agoraphobia Cognitions Questionnaire - adapted; the Panic Safety-Seeking Behaviours Questionnaire – adapted; the Mobility Inventory - adapted) are used, alongside information obtained in the psychological interview, to identify the relevant processes for the young person. This will inform the individual model that the young person completes in Workbook 1 and the specific techniques and behavioural experiments used in each session and as home tasks.

We recommend giving the young person the adapted Agoraphobia Cognitions Questionnaire (alongside a symptom measure, such as the Panic Disorder Severity Scale) to complete before every session. This enables the therapist and young person to then identify what beliefs to work on in the session and track change over time to ensure that the behavioural experiments are having an impact on these beliefs.

The adapted versions of the Bodily Sensations Questionnaire, the Panic Safety-Seeking Behaviours Questionnaire and the Mobility Inventory should be given prior to session 1 and at sessions 3 and 5 and booster sessions. However, they can be given more frequently if helpful, e.g., to check progress on dropping safety behaviours.

14.2 Goal Progress Sheet

The Goal Progress Sheet is used to develop goals early on in treatment. The therapist and young person then revisit these goals in subsequent sessions to evaluate the young person's progress towards their goals and set new goals when goals are reached.

14.3 Panic Diary

The young person should be given a panic diary to complete over the week before each session every time they have a panic attack. They should aim to complete the diary as soon after the panic attack as possible. Workbooks 2 and 3 provide more information about completing the panic diary.

14.4 Session Rating Scale

The Session Rating Scale should be completed at the end of each session to ensure that the person is happy with the therapy sessions. If any scores are below 9, this should be discussed with the young person and used to inform future sessions.

14.5 Workbooks

There are four workbooks which are given to the young person before the corresponding session (e.g., Workbook 1 is given to the young person before session 1). They should be given to the young person at least a week in advance to allow them time to read the workbook and complete the exercises.

There is also a workbook for parents, carers, and supporters that covers some information about panic disorder and how it works (taken from the workbooks for the young person), which is given to them prior to the first therapy session. It also explains what the young person will be doing between therapy sessions, what they need to bring to each session, and how the parent/carer or others (e.g., school staff) can support them so that they get the most out of therapy.

The workbooks are a crucial part of treatment, and it can be helpful for the young person (and parents/carers) to schedule a regular time each week to spend on them. Section 30.1 in the 'Trouble-shooting common problems' provides further advice around what to do if the young person is not managing to read or completing the workbooks between sessions.

If possible, the workbooks and worksheets should be printed in colour (as young people have fed back to us that this makes it easier for them to read them and engage in the treatment). If the young person has specific learning difficulties which makes reading difficult, they may benefit from having the audio versions of the workbooks as well. These are also available on the OxCADAT website.

Early on in each session, the therapist reviews the workbook with the young person. This is an opportunity for the young person to summarise what they took away from the workbook, help them to complete any exercises they found difficult and clarify any misunderstandings. The therapist should encourage them to use the notes page at the back to record anything they want to remember or discuss in sessions.

It is important that the therapist has also read the workbooks and is familiar with the case examples and content of each workbook.

14.6 Additional worksheets for specific beliefs

Additional handouts dealing with common catastrophic thought (e.g., 'I'll faint' or 'I'll lose control') may also be used by the therapist if relevant to the young person's concerns. These sheets cover the following:

- Could these strong sensations really be caused by anxiety?
- Why do I notice worrying symptoms much more than I used to and often when I am relaxing or resting?
- Will I fall over when I feel anxious and wobbly?
- Will I faint when I feel anxious?
- Will I faint if I get very hot?
- Why do I get chest pains – does this mean there is something wrong with my heart?

- Why do my hands shake if I'm not losing control?
- Is it possible to run out of air and faint or suffocate in a stuffy room?
- How do I know I won't stop breathing and suffocate if I don't control my breathing?
- Why do things sometimes start to shimmer or move in front of my eyes?
- Why do I experience feelings of unreality?
- Why can't I get control of my thoughts?

They can be used in session and/or given out for the young person to read and complete outside sessions where relevant to the young person's sensations and beliefs (e.g., identified through the process questionnaires and through discussion). It works best to give them to the young person when focusing on specific beliefs over the course of the sessions (rather than giving them all the relevant worksheets in one go early on in treatment).

14.7 Behavioural experiments record sheet

The behavioural experiments sheet is used to plan panic-related behavioural experiments and to record the outcomes in and outside sessions. An example of a completed behavioural experiment record sheet can be found in the Appendix (section 34).

14.8 Flashcards

Some young people can find it helpful to summarise what they have learned on a flashcard. This could be on a small card (such as one that might be used for revision) or a note on a phone. The first part includes the main fearful thoughts, and the second part clarifies that the thoughts are not dangerous and reminds the young person what to do and how they have discovered this (e.g., learning from key behavioural experiments). This is used to consolidate learning and act as a reminder. It is often helpful for the young people to put the card somewhere so that they will regularly see it, such as a prominent place in their bedroom. An example of a completed flashcard can be found in the Appendix (section 35).

14.9 Therapy blueprint

Relapse prevention strategies are summarised in a therapy blueprint, which is completed in session 5 and then developed further as necessary at the booster sessions. It can be helpful to explain the blueprint and give it to the young person at the end of session 4 so that they can look at it and make a start on outside the session and bring back to session 5. An example of a completed therapy blueprint can be found in the Appendix (section 36).

14.10 Video/audio-recorder

Sessions should be recorded by video or audio. Recordings can be used within therapy sessions (e.g., the person could demonstrate how they look when they think they are losing control and then watch the video back to see what they look like and whether their predictions are true). The audio recording of the session should also be made available to the young person so they can listen back to it afterwards to help them consolidate what was learned in the session, or if they prefer, they could record the session on their phone. In our experience, most young people are willing for the session to be recorded if they understand why the session is being recorded, what the recording will be used for, who will see it, and when/how it will be deleted. Written consent from the young person (and their parent/carer if the young person is aged under 16 years) should be obtained. It should be emphasised that the recording is for the young person's personal use and should not be distributed further by any means (e.g., put on social media).

In addition, the therapist can watch the session back afterwards individually and within supervision, to identify what has gone well, what they would do differently and to plan further sessions. The video/audio should also be used to assess competency in delivering this treatment to young people using the Cognitive Therapy for Panic Disorder in Adolescents: Checklist of Therapist Competencies (Clark & Waite, 2023), adapted from Clark et al. (2002) and available on the OxCADAT website.

15 Preparations before every session

Session checklists (sections 31.6 to 31.12) summarise the tasks that need to be completed in preparation for each session. Before the first four sessions, the therapist must ensure the young person has received a copy of the questionnaires and associated workbook (e.g., Workbook 1 to complete and bring to session 1) to complete and bring to the session.

Before every session, the therapist should ensure they are familiar with all the material and case examples from the workbook. They should also make sure they have all the necessary materials to use in the session (e.g., behavioural experiment sheets, goal progress sheet and session rating scale) and to give the young person to complete outside the session and bring to the next session (e.g., the next workbook and questionnaires).

16 Content of every session

Every session will involve setting an agenda and ensuring the young person (and/or parent/carer if present) has the opportunity to contribute. The session will always include:

- A brief catch-up on how things have been since the previous session (particularly in relation to panic attacks using the panic diary and progress on goals)
- A review of questionnaires (and risk)
- A review of the workbook
- A review of between session tasks that the young person has completed at home or elsewhere (from session 2 onwards)
- A discussion and exercises/behavioural experiments (*this is the main focus of the session*)
- A discussion and written plan of what the young person is going to do before the next session (including completing workbooks and questionnaires)
- Feedback on the session
- Completion of the session rating scale

At the end of the session, the therapist will also take photocopies/photos of the completed workbooks, behavioural experiment sheets and other materials so that they and the young person have copies. There may also be some planning of the following session, especially if it involves being off-site.

17 Carrying out behavioural experiments

Experiential learning through behavioural experiments is a crucial part of treatment, enabling the young person (and therapist) to test out how things really work in practice. Their main purpose is to test the validity of the young person's beliefs and to construct new, more helpful beliefs and to learn that what they are afraid of does not happen when they do not carry out safety behaviours.

17.1 Types of behavioural experiments

Most of the behavioural experiments are 'active' experiments that involve the young person and/or therapist testing out the young person's beliefs by doing things. For example:

- Doing things to test out the individualised model developed in Workbook 1 (e.g., seeing if focusing attention on bodily sensations, increases the beliefs that something bad will happen)
- Manipulating or dropping safety behaviours (e.g., not doing deep breathing during a panic attack)
- 'Doing the opposite' of what the anxiety says to do (e.g., standing up rather than sitting down when feeling wobbly during a panic attack)
- Acting 'as if' Theory B (i.e., that the sensations are not harmful) is true (see later section 24.1 for further explanation of Theory A and B)

It can also be useful to conduct observational experiments. For example:

- Conducting surveys (e.g., what would someone think if they saw someone being sick?)
- Finding out information from the internet (e.g., using a trusted website such as <https://www.nhs.uk> to learn about the symptoms of a heart attack)
- Observing what people do in specific situations (e.g., if the therapist replicates the symptoms of a panic attack in a shop, do other people notice, stare and frown, laugh etc.)

17.2 Before carrying out any behavioural experiment

It is important to discuss and plan the form and content of behavioural experiments collaboratively with the young person before they are carried out. It can be helpful to look at their responses on the questionnaires to generate ideas. The experiment should be planned to test predictions. For example, the therapist might say:

'I notice on your questionnaires, that you are really worried about the sensation of feeling short of breath and your highest belief rating is for the thought that you are going to suffocate. Shall we focus on this belief in the session today?'

The therapist would then start by asking the young person to tell them what they have learned so far that tells them that the belief may not be true. It can be helpful to remind them of any previous discussions, workbooks/worksheets that they have read, or previous behavioural experiments, and then ask for their ideas of what could be done to build on this learning.

'I wonder if this is something we can test out through an experiment?'

'I know this is going to feel scary but what could we do that would bring on the worry that you are going to suffocate so we can find out what *actually* happens – whether it fits with Theory A or Theory B?'

'Let's use this 'behavioural experiments record sheet' to plan what we are going to do and your predictions about what might happen...'

The young person will then fill in the first half of the record sheet to record the experiment – the prediction and what they are going to do to test it out. The young person should be asked to give a belief rating, from 0-100%, for each prediction.

Typically, behavioural experiments involve doing something to bring on the bodily sensations that the young person will experience during a panic attack and/or try not to control the sensations when they are present (e.g., by dropping safety behaviours).

If the young person records their prediction as 'I'll have a panic attack', it is important to emphasise that although unpleasant, this is actually the point of the experiment – to bring on the sensations – but the reason for doing this is to test out what then actually happens. Therefore, in the prediction column, rather than 'I'll have a panic attack' it should be revised along the lines of 'when I experience the sensations, I'll [suffocate/lose control etc.]'.

17.3 During the behavioural experiment

As experiments are often emotionally challenging, it can be helpful for the therapist to model doing the experiment (potentially going first or doing the experiment alongside the young person). For example, the therapist may also join in experiments that involve over-breathing, holding their breath, or staring at an object. Once the young person's beliefs are activated, it is important that the experiment continues for long enough to get the symptoms to a level where they can fully test whether the feared outcome (e.g., they will pass out or lose control) will occur. The therapist should also check that the young person isn't doing anything to try to control the sensations (i.e., safety behaviours).

During the experiment it is helpful to ask questions such as:

'What is going through your mind right now?'

'How are you feeling?'

'It doesn't seem like you've [fainted/died] – how come?'

'Are you still [holding on]? Can you try to let go and not do any safety behaviours?'

The therapist should make sure the young person is dropping their safety behaviours and make sure they give them lots of praise.

'I know it's really hard, but you are doing really well.'

17.4 After the behavioural experiment

It is important to help the young person to reflect on what happened. The young person should complete the remaining columns on the 'behavioural experiments record sheet' to record the outcome and re-rate their original predictions. Where the person still endorses their beliefs (i.e., their rating is not at 0%), it can be helpful to reflect on the fact that there appear to be some remaining doubts and belief in the prediction.

'What is it that tells you that this might still happen?'

'What would you need to do to get this belief down to 0%?'

'Are there further behavioural experiments that would be useful to do to build on what we have done so far?'

18 Dealing with imagery

Some young people also get brief mental pictures or images of the awful things that they worry could happen (e.g., running from the classroom having 'lost control'). These images fleetingly flash through their minds and can be accompanied by strong emotions. Often the images stop at the worst point (e.g., a young person who is worried about fainting may have an image of themselves collapsing on the floor rather than seeing themselves recovering). If images occur during the panic attack, it is useful to discuss the unrealistic nature of the image, e.g., that they would be more likely to lose consciousness for a brief period of time before recovering, and then practice forming a more realistic image. The young person should be asked to describe the image in detail and then work with the therapist to identify the aspects of the image that are distorted from reality and how they could be transformed into a more positive image. Once these aspects are identified, then the young person should bring the image to mind and then once the image invokes some anxiety, transform the most distressed elements into images that are more positive (e.g., people checking they are ok rather than laughing at them).

19 Specific panic-related behavioural experiments

Panic-related behavioural experiments often involve generating the physical symptoms that occur in panic attacks. This is for two reasons:

1. To demonstrate the likely non-catastrophic cause of the symptoms.
2. To show that if the young person doesn't make any attempt to control the symptoms (e.g., dropping safety behaviours), nothing catastrophic happens.

Experiments should only be selected when relevant for the young person (e.g., based on what they report in session, their questionnaire measures, and written responses in the workbooks). In the Appendices (section 33), there are examples of experiments designed to target a large range of common panic beliefs (taken from Clark and Salkovskis, 2009).

19.1 Learning the likely non-catastrophic cause of the sensations

The therapist typically begins with experiments to help the young person understand the true cause of their sensations. For example:

- That sensations are often triggered by fearful thoughts, caused by a range of things that often make someone feel anxious.
- If an individual focuses attention on their body on the lookout for sensations, this can lead them to become aware of sensations they had previously not noticed.
- That safety behaviours may paradoxically bring on (or intensify) some of the sensations.

These experiments are undertaken to help the young person to find new, less frightening explanations for their symptoms. Examples of these types of experiments are provided in the following sections.

Generally, the young person is not told in advance that these experiments may induce their feared sensations as firstly, this may lead to them not fully engaging in the experiment and secondly, experiments may not always invoke or amplify feared sensations in some individuals. When carrying out experiments that involve bringing on sensations, it is important that the therapist remains calm and shows the young person that they are not concerned about the sensations and do not see them as dangerous.

19.1.1 Paired Associates exercise

In 'Worksheets for Specific Beliefs' there is a worksheet called 'Could these strong sensations really be caused by anxiety?' (Pages 2-4). This is also known as the 'Paired Associates' exercise or experiment. This can be useful early on in therapy (e.g., session 1) if the young person has any doubts that the strong sensations could really be caused by anxiety. It can be done in session or as an activity between the sessions. If conducted in session, it can be introduced by saying something along the lines of:

'I wonder if we could try a little exercise to understand a bit more about what is going on and what is causing these intense sensations?'

'I'd like you to read the pairs of words on this sheet out loud and as you do so, I'd like you to really think about the words and what they mean.'

The young person is handed the list of words, which consists of two columns of word pairs, linking a sensation to a feared catastrophe (e.g., 'breathlessness – suffocate'). When it is evident that this exercise is starting to bring on bodily sensations, the young person is asked further questions:

'Can you describe what is happening in your body?'

'Are they similar to what you'd get in a panic attack?'

'If you had carried on reading the words, what do you think might have happened?'

'What do you make of the fact that reading the words can bring on the sensations?'

'What does that mean for the idea that there is something genuinely wrong?'

'What does this mean for the idea that strong sensations could actually be caused by anxiety?'

If they are not experiencing any changes in their sensations whilst being seated, it can help to ask them to stand up and try it again, especially if feeling faint or dizzy is one of the key feared symptoms. Often reading the words while standing can bring on more worrying thoughts and the anxiety generated can bring on the sensations.

Occasionally young people may experience many of their sensations but say that this is just because it's stressful and stress triggers panic attacks because of an underlying serious illness. If this happens, it can be followed up with a further activity:

'Can we try the exercise again, but this time I'd like you to read the words and insert 'does not mean that I will' between each pair of words. 'For example, 'breathlessness does not mean that I will suffocate'.'

This should be followed up with questions, such as:

'What happened this time?'

'How did that differ to the first time?'

'What does that mean for the idea that there is something genuinely wrong versus the idea that the sensations are caused by anxiety?'

It can also be helpful to relate this back to Theory A and B and ask the young person which theory these findings support (i.e., Theory B – that sensations are caused by anxiety rather than there being something wrong with them). Further information on Theory A and B can be found in section 24.1.

There is also a second part to this worksheet, where the young person is asked to think of a time when they knew they would have to do something frightening and to reflect on the sensations they experienced and the extent to which they were similar to the sensations in a panic attack. If helpful, this can be done within the session or as a home task.

19.1.2 Hyperventilation experiment (part 1)

If the young person reports feeling short of breath in a panic attack, it is likely that a lot of their sensations are being caused by hyperventilating or over-breathing (i.e., rapid/deep breathing). These sensations (e.g., shortness of breath, racing heart, dizziness, numbness, or tingling sensations) are often interpreted as a sign that they are about to faint, suffocate or possibly die. It can be helpful to do an exercise where the young person is asked to breathe as they would in a panic attack. The therapist may use the following questions:

‘Can you show me how you normally breathe in a panic attack?’

‘Can you carry on doing that for a little while so we can see what happens?’

‘What sensations are you noticing?’

‘Is this similar to what happens in a panic attack?’

If, after a brief period, this brings on sensations similar to those in a panic attack, the therapist can explain to the young person that the feelings are brought on by the way they respond to feeling short of breath and they are harmless. Anyone who breathes quickly and deeply will experience the same sensations. The therapist might even model this by over-breathing themselves and telling the young person what they are experiencing. It can be helpful to explain that the sensation of feeling short of breath in a panic attack is misleading – it is a common symptom of anxiety but when people are anxious the reality is that they are generally taking in more oxygen.

Some young people may have been told that one way of controlling panic attacks is to take deep breaths. Paradoxically, this apparent common-sense advice might end up making things worse by making the sensations more intense as they can extend and exacerbate the hyperventilation cycle (by increasing the amount of oxygen and reducing the amount of carbon dioxide in the blood stream, causing further symptoms, such as dizziness/light-headedness, shortness of breath and numbness/tingling). Breathing techniques can become a safety behaviour, stopping the young person finding out that if they didn’t try to control them, their worst fear would not come true. They can also be difficult to get right or start using early enough to prevent sensations getting out of control. Consequently, in cognitive therapy, young people are not taught breathing techniques and where young people change their breathing as a way of managing their panic attacks, experiments are conducted to understand their effect.

A further hyperventilation experiment (part 2) can then be undertaken to learn what happens if you bring on the sensations and don’t do anything to control them (see section 19.2.1).

19.1.3 Chest pain experiment

Chest pains before and during a panic attack are often caused by posture and breathing patterns, such as taking shallow breaths when the chest muscles are constricted and tense. It can be helpful to start by exploring what the young person was doing when they experienced the chest pain, e.g.,

whether they were hunched up and had tension in their upper body. In such instances, the following experiment can be used to explore the true, non-catastrophic cause for the chest pains.

The 'Worksheets for Specific Beliefs' has a worksheet called 'Why do I get chest pains – does this mean there is something wrong with my heart?' (Page 9) and the following experiment that can be done in the session or as a between-session activity:

- Take a deep breath, and do not let it out again. While holding this air in your lungs, take short breathes in and out for two minutes if you can manage it. What do you notice happening?

If this doesn't succeed in bringing on the chest pains, a further experiment could be:

'I'd like you to breathe out completely, make your body all slumped and now take small, shallow, frequent breaths in your upper chest'

If these experiments bring on chest pain, the therapist can then help the young person to consider whether these changes in posture and breathing may account for the pain they experience in a panic attack. Sometimes the young person may not initially identify that they were in a situation where they had a tense upper body and were breathing against that tension before the chest pain occurred. However, the experiment may still be worth doing - if it does reproduce chest pain the young person may then still conclude that it may be relevant.

19.1.4 Visual disturbances

Some young people who have sensations of unreality, where they feel that either they or the world around them look unreal, may have these sensations triggered by visual patterns. For example, striped patterns of vertical lines that might be seen on the stairs of an escalator may lead to feelings of unreality and dizziness. Long flights of escalators in particular environments (e.g., the London underground) can particularly invoke these sensations.

The 'Worksheets for Specific Beliefs' has a worksheet to help explore visual disturbances:

- 'Why do things sometimes start to shimmer or move in front of my eyes?' has a visual grid for the person to stare at to bring on visual disturbance.

The young person can be asked to describe what they experience and then this can be explored further to understand how this is being misinterpreted as evidence for there being something wrong. Another possible cause of things looking unreal is checking that things are real (see section 19.1.6).

19.1.5 Selective attention exercise

Because of concerns around the dangerousness of physical symptoms, the young person may find themselves scanning their body, on the lookout for sensations a lot of the time and believe that that the sensations they then notice are evidence that there is something seriously wrong. This is mentioned at the end of Workbook 1.

There are two experiments in the materials to help the young person learn about the role of attention in raising awareness of bodily sensations that may then generate worry, even though in reality they are normal and harmless.

In Workbook 2 (Page 9), the young person is asked to:

- Start to think about all the sensations you have in your feet as they press against the floor inside your shoes. Do you notice sensations in your feet that you weren't previously aware of? What does this tell you about how focusing on your body amplifies your awareness of sensations?

In the 'Worksheets for Specific Beliefs' (Page 5), there is an experiment in the section 'Why do I notice worrying symptoms much more than I used to and often when I am relaxing or resting?'

- Sit quietly and focus on your body. Make a note of the sensations in your legs, arms, shoulders, and body. Were you aware of all these sensations before doing this?
- Now look around the room and describe one of the objects in it out loud. How many sensations were you aware of when you were paying attention to something else?

These exercises can be done in the session or as an outside session activity building upon what was done in the session. It can be helpful to ask the young person to focus their attention on the parts of their body they would normally pay particular attention to and notice what happens.

Selective attention experiments enable the young person to learn that before the experiment they were not aware of any sensations, but once they paid full attention to their body, they began to be aware of sensations that they had not previously noticed. They are also likely to find that by moving their attention onto other things, they are then less aware of the sensations.

19.1.6 Checking that things are real

Feelings of unreality are common in young people with panic disorder and often lead to worries around losing control or going crazy. As a result, a safety behaviour that is often used is to stare at things (e.g., part of their body or the external environment) in a fixed way to check that they are real. Staring in this way, without the normal saccadic eye movements, tends to make things look strange and two dimensional, which can then be taken as evidence that there is something wrong. For this experiment, the therapist might say:

The 'Worksheets for Specific Beliefs' has a worksheet (Page 15) 'Why do I experience feelings of unreality, with the following experiment:

- Look at the back of your hand and fixate on one spot on it without moving your eyes away from it. At the same time, be aware of the edge of your hand and your surroundings. Do this for a minute or so. What do you notice?

A similar exercise can involve staring at a fixed object in the room (e.g., a spot on the wall) to check that things are real.

19.1.7 Trying to control thoughts

When young people are concerned that they are losing control or going crazy they may see their difficulty in controlling their thoughts as evidence that they are losing their mind. They may then try and control or suppress certain thoughts or try to prevent their mind from wandering as a way of managing this, which typically has the effect of increasing the frequency of the undesired thought process.

The 'Worksheets for Specific Beliefs' has a worksheet 'Why can't I get control of my thoughts' (page 16) with the following experiment:

- Intentionally try not to think of a white bear for a minute or two. What do you notice happens?

19.1.8 Making an effort to continue breathing

Sometimes when people get anxious, they feel that they should be constantly aware of their breathing, and that they should control it, in case they don't get enough air, or their breathing stops.

The 'Worksheets for Specific Beliefs' has this experiment:

- 'How do I know I won't stop breathing and suffocate if I don't control my breathing?' – this experiment involves the young person holding their breath for as long as they can to learn that their body's automatic reflex will always kick in (rather than them passing out).

If this experiment is done in session, it is helpful for the therapist to start by holding their breath before the young person does so the young person can learn what happens to the therapist first.

19.1.9 Walking with tense legs

A common safety behaviour to deal with worries around collapsing or falling is for the young person to tense up their legs to try to strengthen them as they walk.

'You mentioned that when you have wobbly or jelly legs, you tense up your legs to try to make them feel stronger and stop you collapsing. Can you show me what you do?'

'Can we try walking with our legs tensed up?'

'What do you notice this does to your sensations and thoughts that you could collapse?'

To replicate feelings of panic, the therapist could do this following on from over-breathing or bringing on dizziness through exercise, when the young person's legs feel more wobbly.

19.2 Learning what happens if you bring on the sensations and don't control them

After carrying experiments to help the young person understand the true cause of their specific sensations, experiments will then typically move on to the young person bringing on the sensations and doing nothing to control them.

19.2.1 Hyperventilation experiment (part 2)

Following on from the earlier hyperventilation experiment, where the young person learned more about how their response (over-breathing) to a shortness of breath was responsible for bodily sensations, there is a second hyperventilation experiment to enable the young person to learn that if they bring on the sensations and do nothing to control it, nothing bad happens. This time the young person is asked to breath quickly and deeply (rather than breathing as they normally would in a panic attack) so that the sensations are more intense. As the young person may not be willing to do this on their own, the therapist would typically do this alongside the young person.

Strenuous over-breathing is generally harmless. However, it is counter-indicated if an individual has certain physical conditions (e.g., asthma, late-stage pregnancy, cardiovascular disease, excessively low blood pressure). If the therapist has any concerns about doing strenuous over-breathing with the young person, they should consult the young person's GP to ensure it is safe for them to go ahead.

The experiment can be conducted by asking a series of questions and making suggestions such as:

‘Now that you’ve learned that it’s over-breathing that causes the feelings of [dizziness etc.], I wonder if we could capitalise on this and explore your worry that when you feel panicky, [specific belief] could happen.’

‘Let’s try doing a lot of over-breathing so that we start to feel [dizzy etc.] and then try not to control it - to discover it really is harmless. Although we’ve talked through it being harmless, it would be great for you to be able to discover it for yourself.’

‘Together, let’s try breathing quickly and deeply to bring on the sensations.’

‘Let’s take a deep breath in and then breathe out again and do it for a minute or so - until we both start to feel the sensations.’

‘I’ll let you know when I notice the sensations by putting up my hand.’

Once the sensations come on:

‘I’m getting [specify sensations].’

‘Are you noticing anything? What sensations are you getting?’

‘Let’s keep going and push things a bit further by standing up.’

‘How are you feeling?’

‘Are you doing anything to try to control the sensations?’

‘Let’s push things a bit further – let’s move around and swing a bit, lean forward and backwards.’

At the end of experiment:

‘How do you feel?’

‘What does that tell you?’

‘How dangerous are these sensations?’

19.2.2 Getting out of breath through exercise

As well as doing things (safety behaviours) to try to control feared sensations, young people often change the way they behave between panic attacks to try to prevent an attack from happening. In the initial assessment, it is helpful to ask the young person about any ways in which they have changed their behaviour to prevent experiencing sensations that might trigger a panic attack (e.g., avoiding doing anything that might put up their heart rate or make them feel slightly dizzy). Any such change in behaviour can be a source of fruitful behavioural experiments as the young person can be asked to do the opposite of the behaviour, experience the sensations, and discover that they are not dangerous.

For example, some young people avoid exercising, do less than they used to or stop when they reach a certain level of breathlessness to prevent having a panic attack. In these instances, it can be helpful for the therapist and young person to undertake some exercise, bringing on a racing heart and breathlessness and continuing beyond the point where the young person would normally stop. Running up and down stairs or physical exercise (e.g., star jumps or jogging on the spot) can effectively bring on the sensations.

‘You mentioned that you tend to avoid exercise because you worry it will bring on a panic attack and be harmful - but every time you decide not to play football with your friends or run that extra bit harder in P.E. it’s telling you that there is something wrong. We want you to be able to discover that if you go for it and really push yourself, you’ll still be alive.’

‘So, there is a good argument for saying let’s do a bit of exercise and see what happens.’

‘Let’s really try and get out of breath and not do anything to control the sensations.’

‘When the panic tells you to slow down, let’s do the opposite and speed.’

19.2.3 Going into feared situations

Where young people have been avoiding situations, it will be important to conduct experiments where they intentionally go into situations that they fear and not use their safety behaviours when they start to feel panicky to learn that their worst fears do not occur. These experiments typically follow on from those that involve bringing on specific sensations to find out what causes them.

The adapted Mobility Inventory can be helpful to identify situations, e.g.,

- Public transport
- Shopping centres
- Lifts
- Small spaces
- Social situations

In these experiments, it can be helpful to exaggerate symptoms, such as doing a bit of exercise to bring on breathlessness and a rapid heartbeat, for the young person to *really* learn what happens when they experience sensations and do nothing to control them. When in feared situations, it is important to keep an eye out for safety behaviours (for example, sitting near the exit or using a mobile phone while on a bus) and to encourage the young person to drop the safety behaviours.

Many young people with panic disorder will also be socially anxious and beliefs around looking silly and being negatively evaluated while having a panic attack are common. Consequently, it will be important to ensure that some experiments (typically later in treatment) are conducted in social environments. Predictions should be well-specified. For example, how will they know if other people are judging them in a negative way? What behaviours would they notice in the other person?

20 Therapist tasks after each session

After each session, the therapist should complete the progress notes in the young person’s electronic record. They should ensure that they have provided detail on the beliefs worked on in the session and associated behavioural experiments (including the beliefs and % belief ratings before and after) and jot down ideas for further behavioural experiments and things to follow up in the next session. They should score and upload the young person’s questionnaires and the copy of their completed workbook (the young person will retain the original copy) to their electronic records. They should make a note of specific issues to discuss in supervision, upload video/audio recording and delete from the device and make sure they have scheduled the next diary appointment and booked the room for the next session.

21 Young person's between session tasks

Towards the end of each session, it is important that the therapist and the young person collaboratively identify and plan behavioural experiments and other activities for the young person to complete between sessions to further test out and disconfirm the beliefs that are being focused on in the treatment and help them make progress. These tasks should encourage them to apply information they have learned from in-session experiments to a range of external situations. Where the young person has a lot of avoidance, the behavioural experiment which relates to the activity being avoided should first be done in session so that the young person can learn how to structure and undertake the activity. Sometimes it can be helpful for the therapist to also undertake experiments between sessions (e.g., surveys) to bring back and discuss at the next session. The young person should be asked to complete a behavioural experiment sheet for each experiment so that they can show the therapist what they did and their reflections at the following session.

22 Booster sessions and follow-up period

Having two booster sessions over the following three months allows the young person to keep the momentum going from sessions and continue to make progress. It gives them time to put things into practice and build on what they have done in the sessions. The focus of the booster sessions should be on reviewing progress, the young person feeding back the results of behavioural experiments, planning further experiments, and problem-solving any arising difficulties. At the second booster, it is also helpful for the young person to review their therapy blueprint (completed in session 5) and make any necessary revisions. As before, if any risk has been identified, this should also be monitored and reviewed.

We would suggest having the second and final booster session three months after session 5. There is flexibility in when to schedule the first booster session. For some young people, it may be appropriate to schedule it half-way between session 5 and the final booster session (around six weeks after session 5). Some young people may choose to have the first booster session a little earlier so that they do not lose momentum from the sessions. Other young people may have upcoming events that may invoke panic attacks, such as exams, and therefore chose to have a booster session prior to or immediately after this.

In addition to the booster sessions, some young people find it helpful to have some form of brief check-in to be able to let the therapist know of their progress and plans for behavioural experiments and other activities. This can be done by phone, email, or video conferencing.

22.1 Measuring satisfaction with care at the end of treatment

At the end of treatment, we suggest that the young person and their parent/carer each complete the Experience of Service Questionnaire (ESQ; Astride-Stirling, 2002). This measure that was developed by the Health Care Commission as a means of measuring satisfaction in Child and Adolescent Mental Health Services. There are versions for young people and their parents/carers to report on the extent to which they agree with 12 statements looking at what the respondent liked about their care and the environment, what they felt needed improving, and three free text sections for any other comments. It is routinely used within child and adolescent mental health services and has been demonstrated to have good psychometric properties (Brown, Ford, Deighton, & Wolpert, 2014).

23 Session 1

A checklist for session 1 can be found in section 31.6. As well as the standard session activities outlined above in section 16 (agenda setting; catch-up and review of panic diary and questionnaires; review of workbook; discussion/behavioural experiments; planning between session activities; feedback and session rating scale), the first part of session 1 involves a reminder around confidentiality, checking that they are willing for the session to be recorded and a discussion of how the young person wants their parent/carer involved in treatment.

23.1 Reviewing Workbook 1

The young person will have been given Workbook 1 to read and complete before the session. Reviewing the workbook in session is a key activity and should be done with the young person, with questions such as:

- How did you find the workbook?
- What did you find helpful?
- What were the key takeaway messages from the workbook?
- Was there anything you didn't understand or wanted to discuss further?

It is helpful to reinforce messages around self-efficacy (e.g., 'that's really perceptive of you'). If they have not completed the exercises, this should be done in the session.

23.2 The individualized version of the cognitive model

In session 1, the therapist and young person construct an individualised version of the cognitive model. The young person has had an opportunity to do this in Workbook 1, to show how their specific thoughts and sensations contribute to the vicious circle of panic. If the young person has managed to complete the diagram in the workbook, the therapist should ask them to talk them through it and work with the young person to elaborate it as needed. If they have had difficulty completing it, then this should be done in the session.

It is important that by the end of this session, the young person can (a) draw the links between specific somatic sensations and specific thoughts, and (b) understand the role of beliefs and that addressing them is the key part of treatment. Again, the questionnaires can be helpful to refer to, to see the feared sensations and thoughts that the young person has experienced over the previous week.

Note, that at this point, safety behaviours are not included in the model, although they are included in the model in a later workbook. This is so that the young person is not over-whelmed with information before they have had their first therapy session. However, they are likely to already have some idea about safety behaviours as they will have completed the adapted Panic Safety-Seeking Behaviours Questionnaire prior to treatment and Workbook 1 briefly discusses the role of avoidance and taking precautions through safety behaviours. Safety behaviours are explained in more detail in Workbook 3, where the young person is also then encouraged to try dropping their safety behaviours to find out what happens – but if it seems helpful to explain them further in this session then this can be done.

23.3 Evidence for feared outcomes

It is important to find out about the young person's evidence for their beliefs, with questions such as:

‘What makes you feel this is true?’

‘Is there anything that has happened to make you vulnerable?’

‘Is there anything that you’ve seen or heard that makes you feel this is true?’

‘Does this relate to the intensity of the sensations?’

Typically, the strongest evidence for the beliefs is the very strong and unpleasant physical sensations. However, some young people will have personal experience (e.g., of fainting or vomiting) or be drawing on other experiences (e.g., someone they knew who had a heart attack) that they may see as evidence for their beliefs. In session 1, it is helpful to revisit this and to get further detail to then reframe this supporting evidence (for example, by distinguishing between fainting episodes and panic attack – see ‘Trouble-shooting common problems’ section 30.3 for further information).

Workbook 2 develops this further by exploring evidence for the sensations and then encouraging the young person to consider other explanation.

23.4 The role and effects of anxiety and physical symptoms caused by anxiety

To be able to make sense of what is actually happening in a panic attack, it is likely that the young person will need further information about the role and effects of anxiety and the physical symptoms caused by anxiety. The additional worksheets for specific beliefs include information around many of these physical sensations (and associated exercises/behavioural experiments for the young person to gain further evidence). For example:

- Many bodily symptoms are caused by over-breathing.
- Fainting is caused by a drop in blood pressure whereas when you are anxious it temporarily goes up and your heart beats faster, as part of your body’s ‘alarm reaction’ to danger.
- Chest pains are due to harmless muscle spasm. There are lots of muscles in your chest, between each pair of ribs. These muscles can start to ache if you breathe in a tense way.
- Everyone has very mild shaking in their hands but muscle tension in the arms and hands can cause this to become exaggerated.
- Breathing is partly controlled by an automatic reflex, which cannot be suppressed for long. This means that however much you change your breathing the reflex will automatically make you breathe in the best way from time to time.
- Visual disturbances during a panic attack can be caused by staring at objects (which sometimes anxious people often do if they believe this will help them stay in control or keep their balance) or can be produced as a sort of optical illusion by certain patterns.

The young person will learn more about anxiety in Workbook 2 (e.g., the ‘fight or flight’ response). Therapists may also benefit from having a more detailed understanding of common physical sensations so that they can provide further explanation and clarification if needed. This can be found in section 31.

23.5 Behavioural experiment(s)

As outlined earlier, behavioural experiments are a key part of treatment, and the therapist should include one or two experiments in the first session.

If the young person has any doubts that the strong sensations could really be caused by anxiety, then the ‘Paired Associates’ exercise can be useful (see section 19.1.1). Another experiment that is helpful early on is for the young person to show you how they breathe in a panic attack. If they are

over-breathing then it can be helpful for both you and them to continue to breathe in this way for a minute or two to see what happens to the sensations (see Hyperventilation experiment (part 1), section 19.1.2), to understand that over-breathing causes intense bodily sensations and associated thoughts.

23.6 Developing goals

Goal setting should be collaborative, agreed upon and owned by the young person. Law and Jacob (2015) provide helpful guidance around setting goals, with questions such as:

- If we were to work together in a very helpful way, when we agree to stop meeting, what things would you hope to be different in the future from how things are now?
- When you no longer have difficulties with panic attacks, what would you want life to look like then?

Using the goal progress chart, we typically aim to have around three goals that are rated and reviewed at each session.

Some young people may identify a goal that is unrealistic, such as having minimal bodily sensations. It can be helpful to discuss how medical experts recommend having an active lifestyle to be healthy and live longer. Being active tends to mean having more rather than less bodily sensations (e.g., as you exercise). There will also be other times in their life where it is likely that they will have strong sensations (e.g., when they feel stressed, are rushing around, when they exercise, if they drink alcohol). Therefore, a more realistic goal might be related to feeling confident that when they get the sensations, nothing bad is going to happen.

23.7 Between session activities

The young person will read and complete Workbook 2 (which includes an exercise around attention) between sessions 1 and 2. It can also be helpful to them to draw out additional individualised models for other times when they have experienced a panic attack. As in all sessions, they will also complete a panic diary (except the final column) and questionnaires.

24 Session 2

A checklist for session 2 can be found in section 31.7. The session includes the standard session activities outlined in section 16 (agenda setting; catch-up and review of panic diary and questionnaires; review of workbook and between session activities; discussion/behavioural experiments; planning between session activities; feedback and session rating scale).

24.1 Building an alternative explanation - Theory A and B

In treatment young people are encouraged to compare two different ways of seeing their problem. This idea is introduced in Workbook 1 on page 8. This is referred to as Theory A and B and can be a useful way of making sense of the problem and tracking change over time. The young person can come up with alternative names to Theory A and B if they prefer.

The first theory (Theory A) represents how they have been making sense of the problem so far, that is, that the symptoms they experience are dangerous and are a sign of serious physical or mental problem (e.g., fainting or losing control). Theory B represents a new way of seeing the problem. This would see the problem as the person's mistaken belief that the symptoms are dangerous and the vicious cycle of thoughts, feelings and sensations that result from the belief.

For example, this could be written down as:

Theory A: The panic attacks are a sign of something being seriously wrong and that I am in danger of (fainting, losing control, dying, etc.). If this is true, I need to do everything I can to stay safe (e.g., avoid situations and take precautions)

Theory B: The problem is *my belief* that there is something seriously wrong. My panic attacks are actually the result of a vicious cycle where intense but normal body sensations are increased by me thinking and worrying that they are dangerous and doing things that accidentally end up making them worse. If this is true, I don't need to do anything to stay safe.

It can be helpful to write these two explanations down on a sheet of paper, divided into two columns. Each theory can be given a belief rating at the beginning of treatment, and it is fine if the beliefs do not add up to 100%. As the young person conducts behavioural experiments, it can be helpful to ask whether the results are consistent with theory A or B and to then record them in the appropriate column. It can also be helpful to track change in beliefs for theory A and B over the course of therapy.

24.2 Behavioural experiment(s)

Behavioural experiments follow on from the previous session and it is likely that they will continue to involve bringing on physical sensations to test predictions that the young person has identified as important through discussion and questionnaire measures, and this will be recorded using a 'behavioural experiments record sheet'. See sections 14.7 and 17 for further details.

24.3 The builder's apprentice metaphor

Following this session, the young person will read and complete Workbook 3, in which they will learn more about safety behaviours. In preparation for behavioural experiments which involve dropping or reversing safety behaviours, the builder's apprentice metaphor can be helpful to develop an understanding of the function of safety behaviours and how they can maintain beliefs and the problem more generally. Further detail on the metaphor and how it may be developed further can be found in Stott, Mansell, Salkovskis, Lavender, and Cartwright-Hatton (2010).

The story goes that there is a new trainee builder (or apprentice), and it is their first day working on a building site. The builders play a trick on them by telling them that the wall that has just been built isn't stable until the cement between the bricks is completely dry and so the trainee needs to hold the wall to stop it falling over until the cement has dried. The other builders then stop for a tea break while the trainee stands holding the wall. Actually, walls are stable without being held up and so it is completely unnecessary for the trainee to hold the wall. However, because they are new to this, they don't know this is the case. Sure enough, by the end of the day, the wall is still standing...

This is then followed up with some questions to help link the metaphor to the young person's panic attacks, such as:

- If the trainee doesn't realise this is a trick, what do you think they learn?
- What would they need to do to find out whether they need to hold the wall to stop it falling down?
- Do you think there is anything similar about this story to your panic attacks?
- How might this work?
- What is the problem with taking precautions or doing things to stay safe?
- What might this mean you might need to do to learn how the world really works?

24.4 Between session activities

The young person will read and complete Workbook 3 between sessions 2 and 3. As in all sessions, they will also complete a panic diary (including the final column, 'answers to your thoughts of disaster') and questionnaires. There should also be a plan of one or more behavioural experiment that they will complete. It can be helpful for the young person to complete the first part of the behavioural experiments record sheet for these experiments, so they are clear what they are doing and to emphasise the focus on testing beliefs and focusing on what actually happens rather than how they felt. Experiments should focus on testing out and disconfirming beliefs that were focused on in the session and carrying them out between sessions can be framed as continuing to chip away at the belief and take them a bit further in their learning.

24.5 Planning for the next session

At the end of the session, it is helpful to discuss the plan for the next session – especially if the session may be off-site and require the involvement of others (e.g., parent/carer; school staff).

25 Session 3

A checklist for session 3 can be found in section 31.8. The session includes the standard session activities outlined in section 16 (agenda setting; catch-up and review of panic diary and questionnaires; review of workbook and between session activities; discussion/behavioural experiments; planning between session activities; feedback and session rating scale).

25.1 Behavioural experiment(s)

In session 3, behavioural experiments will follow on from the previous session and it is likely that they will continue to involve bringing on physical sensations, as well as manipulating safety behaviours, to test predictions that the young person has identified as important through discussion and questionnaire measures. See section 19.2 for further details on behavioural experiments that enable the young person to learn what happens if they bring on the sensations and do not try to control them. It is likely that experiments will be conducted outside the therapy room in order to maximise learning in different environments.

25.2 Between session activities

The young person will read and complete Workbook 4 between sessions 3 and 4, complete a panic diary and questionnaires. There should also be a plan of one or more behavioural experiment that they will complete, and the young person given blank copies of behavioural experiment sheets.

25.3 Planning for the next session

At the end of the session, it will be important to discuss the plan for the next session. As discussed in section 11.3, it is beneficial for some sessions to be off-site and this is likely to require the involvement of others (e.g., parent/carer; school staff).

26 Session 4

A checklist for session 4 can be found in section 31.9. The session includes the standard session activities outlined in section 16 (agenda setting; catch-up and review of panic diary and questionnaires; review of workbook and between session activities; discussion/behavioural experiments; planning between session activities; feedback and session rating scale).

26.1 Behavioural experiment(s)

Behavioural experiments in session 4 will build on those conducted in previous sessions. It is likely that experiments will be conducted outside the therapy room in order to maximise learning in different environments.

26.2 Between session activities

It can be helpful to explain the therapy blueprint at the end of the session and give the young person a copy to take away, start to complete and bring back to the following session.

26.3 Planning for the next session

As with session 3, it is helpful to discuss the plan for the next session – especially if the session will be off-site and require the involvement of others.

27 Session 5

A checklist for session 5 can be found in section 31.10. The session includes the standard session activities outlined in section 16 (agenda setting; catch-up and review of panic diary and questionnaires; review of between session activities; discussion/behavioural experiments; planning between session activities; feedback and session rating scale).

When reviewing the ACQ, there may be some beliefs that the young person is continuing to endorse at a very low level (e.g., 5-10%). Cognitive measures taken at the end of treatment have been shown to be significant predictors of panic symptoms one year later (Clark et al., 1994; Clark et al., 1999) and therefore the aim should be to get beliefs as close to 0% as possible.

It is important to go through their remaining fears and reasons for the continued belief, with questions/suggestions such as:

‘When you filled in this question, what the reason for it being 5%? Are you still doing some safety behaviours which you think might still be saving you?’

‘Can we try dropping them now so you feel more confident that the thing you are worried out wouldn’t happen if you didn’t do anything to control it?’

‘What would need to happen for you to believe it 0%?’

‘Let’s go through all the arguments for it and see whether there are any holes?’

If the person is completing ratings based on feelings rather than evidence, encourage them to focus on evidence rather than feelings.

27.1 Behavioural experiment(s)

If the questionnaires or discussion indicate there are remaining panic symptoms, associated beliefs or safety behaviours, behavioural experiments should be carried out in the session specifically targeting them.

27.2 Therapy blueprint/flashcards

A key activity in this session is going through the therapy blueprint, which the young person may have started as one of their between session tasks. It is important to make sure that the young

person has answered each question in sufficient detail so that when they come to read it at a later date, it will be understandable and remind them of what they have learned.

As well as the blueprint, it can also be helpful to summarise some of this information on flashcards that they can carry with them to remind them of what they have learned – with the fearful thought on one side and the answers to the thought and a plan for what they will do on the other.

27.3 Managing the booster period

In session 5, discuss and plan for how the young person would like to be supported over the three-month booster period. For example, do they want to check-in every so often around progress to report on what they have done and what they learned to keep the motivation going? It is important to ensure the young person is on board with the idea of continuing with behavioural experiments over this period. It can be helpful to reinforce how much you are looking forward to seeing them and hearing how it is all going.

27.4 Between session activities

The young person should have a clear plan of behavioural experiments that they are going to undertake over the coming weeks that help them to make progress on their goals and be able to live life freely without the panic dictating what they can and cannot do. It can be helpful to refer to the Mobility Inventory to check whether there are activities or situations that they would still avoid. They should also continue to add new information to the therapy blueprint.

28 Booster 1

A checklist for booster 1 can be found in section 31.11. The session includes the standard session activities outlined in section 16 (agenda setting; catch-up and review of panic diary and questionnaires; review of between session activities; discussion/behavioural experiments; planning between session activities; feedback and session rating scale).

28.1 Behavioural experiment(s)

As with all sessions, if the questionnaires or discussion indicate there are remaining panic symptoms, associated beliefs or safety behaviours, behavioural experiments should be carried out in the session specifically targeting them.

28.2 Reviewing the therapy blueprint

The therapist should check whether there is anything the young person has learned over the past few weeks that would be helpful to add to the therapy blueprint that was completed in session 5.

28.3 Between session activities

The therapist should encourage the young person to continue to really push things in the behavioural experiments, so there are no 'no go' areas. This might involve doing more things than they normally would (e.g., going on public transport, going to new places) so that they know that if there are things they don't do, it is because they choose not to do them, rather than it being due to fear. The young person should also continue to add to the therapy blueprint.

29 Booster 2

A checklist for booster 2 can be found in section 31.12. The session includes the standard session activities outlined in section 16 (agenda setting; catch-up and review of panic diary and questionnaires; review of between session activities; discussion/behavioural experiments; feedback and session rating scale).

29.1 Behavioural experiment(s)

Although this is the final session, if the questionnaires or discussion indicate there are remaining panic symptoms, associated beliefs or safety behaviours, it may be helpful for the young person to conduct in-session behavioural experiments to address them. It can be beneficial for the young person to take control of the experiments and possibly conduct them without the therapist actually there to help them take responsibility and sense of self-efficacy in preparation for finishing treatment.

29.2 Reviewing the therapy blueprint

Again, it can be helpful to have a final review of the therapy blueprint to ensure that it has everything included and there is a clear plan for dealing with setbacks and how the young person will continue to work on remaining goals.

29.3 Planning for the future and ending therapy

It can be helpful to bring the young person's parent/carer into the final booster session so that the young person can summarise what they have learned, show them their therapy blueprint and both the young person and parent/carer can feel confident of the plan going forward and how to manage any difficulties. Showing both the young person graphs of their questionnaire measures over the time and the progress they have made in treatment, alongside lots of praise for all the hard work, can be helpful in reinforcing their achievements.

It is important to get feedback on the session and treatment more generally, including both the young person and parent completing the Experience of Service Questionnaire or an alternative measure. At the end of treatment, both should have a clear idea of what will happen next in terms of being discharged, receiving a final report etc.

30 Trouble-shooting common problems

30.1 Not reading/completing the workbooks or doing between session activities

If the young person has not read the workbook, the therapist should ask them to read through it in the waiting room and either complete it in the waiting room or together in the session.

In the session, discuss what got in the way of reading and completing it and generate potential solutions together. It is helpful to start with some open, general questions, such as:

'I notice you weren't able to complete the workbook this week – do you know what got in the way of you doing it?'

'Did you forget to do it, or did you think about doing it and then something stopped you?'

Reasons for not completing workbooks may include that the young person forgot about it, that they have had difficulties reading or understanding the previous workbook and perhaps were worried they wouldn't understand this one and felt embarrassed about it.

If the young person finds reading difficult, encourage them to listen to the audio versions of the workbooks. If they are busy and have trouble remembering, they could schedule time in the week and set an alarm on their phone as a reminder. It can be helpful to identify key people who can also support the young person to complete activities. If they found the previous one difficult to understand, it can be helpful to normalise this and then go through the workbook together to look at the sections they didn't understand.

Where the young person is not completing between session activities, it may also be that they were too frightened to undertake the activities by themselves. More behavioural work may need to be done in the session to bridge them into activities outside the sessions. Further between session activities may need to be identified that are more manageable. It will also be important to ensure that activities relate to the young person's treatment goals.

30.2 Managing intense physical sensations in sessions

It is common for people to experience intense physical sensations in session, and ultimately you want the young person to experience them to learn that they are not a sign of impending danger and that their worst fears do not occur.

If this happens in the middle of an activity (e.g., reviewing responses on questionnaires), then rather than trying to continue with the activity, focus on what the young person is experiencing. This is potentially a 'magic moment' of learning that the therapist may not want to waste. For example, the therapist may say:

'It looks like you feeling rather tense – is that right? Are you noticing any sensations right now?'

'Are any of those sensations similar to those you experience in a panic attack?'

'What is going through your mind when you notice those sensations?'

'When was it that you started having those feelings? Was it when we started talking about...?'

If the young person acknowledges that they have started to experience the sensations when talking about their fears and panic attacks, it can be helpful to get them to reflect on this.

'So, it seems that the sensations may be a response to your fearful thoughts. Just dwelling on those thoughts seems to bring on the sensations - is that what you are noticing?'

It can also be helpful to get the young person to stick with the sensations, to help them experience that they are not dangerous.

'Ok, let's see if you can just stay with the feelings and try and ride it out so you can discover that although they feel horrible, they are not actually dangerous. Then you are in a really good position to show yourself what actually happens.'

'What is it making you want to do to try to control the feelings? See if you can stay with it and try not to do any safety behaviours or anything to stay safe.'

The therapist should make sure the young person is given lots of praise for staying with it. As the sensations start to decrease, then they can start to ask about what they are learning.

'What are you learning about your fears?'

'What do you make of the fact that you are ok – you're still here?'

30.3 If the young person has experience of fainting

If a young person describes having fainted or collapsed it is important to begin by exploring the episodes in detail to make sense of them and understand whether the person fainted or whether there is another more plausible explanation.

If this occurred *during* a panic attack, it is most likely that the young person experienced sensations such as dizziness, became concerned about fainting, and then dropped or ‘fell’ to the ground as a safety behaviour. This action would be under their control and would not have involved losing consciousness. In treatment, the therapist should refer to the relevant worksheets ‘Will I faint when I feel anxious?’ and ‘Will I faint if I get very hot?’ (‘Worksheets for Specific Beliefs’ pages 7 and 8) and Appendix section 33 for relevant psychoeducation and treatment strategies.

However, some young people may experience concerns around fainting in a panic attack *and* have a history of fainting. They may find it difficult to mentally disentangle the two and see the fact that they have fainted as evidence that they are likely to faint when they feel lightheaded and dizzy during a panic attack.

Fainting occurs in around 15% of healthy adolescents (Friedman & Alexander, 2013), is typically harmless and does not cause any long-term problems. It is caused by a decreased blood flow to the brain and is commonly brought on by standing too long in one place (e.g., at a concert), standing up quickly after lying down, not eating, not drinking enough fluids, overheating, or strong emotions due to pain, blood, or an intense shock.

In treatment it can also be helpful to distinguish between the triggers and experiences when the person faints and when they are worrying about fainting due to dizziness and other sensations during a panic attack. For example, people often describe only experiencing tunnel, spotty or greyed out vision, ringing in the ears or difficulties hearing before they faint and not when they are having a panic attack. Similarly, people may often feel anxious during a panic attack but not directly before fainting. It can be helpful for the young person to make a written record (e.g., two columns) so that they can discriminate between the two experiences and then respond appropriately.

Some young people find it helpful to initially use a blood pressure monitor to learn what is happening to their blood pressure during a panic attack (i.e., that is typically normal or high, which is the opposite of what would happen if they were about to faint). For adolescents, normal blood pressure is: systolic (top number) between 112–128 mm Hg and diastolic (bottom number) between 66–80 mm Hg. However, it is important that checking blood pressure does not then inadvertently become a safety behaviour.

The young person may also then find it helpful to try to identify and reduce the triggers on the occasions where they do actually faint. For example, by staying hydrated, having regular snacks and meals, limiting time in hot showers, avoiding standing for long periods in warm environments and getting up slowly. If they begin to feel faint, actions such as flexing/tensing muscles (through ‘applied tension’) can help with circulation and keeping their blood pressure raised.

31 Appendices

31.1 Screening questions for panic disorder

	Yes/No
5. Have you recently been experiencing panic attacks? A panic attack involves a sudden surge of intense fear that reaches a peak within minutes and involves 4 or more of the following sensations or fears: a pounding heart, sweating, trembling/shaking, shortness of breath, feelings of choking, chest pain, nausea, feeling dizzy/faint, chills/feeling hot, numbness/tingling, feelings of unreality or feeling detached from yourself, fears of losing control, going crazy or dying.	
6. During the panic attacks, have you had any of these kinds of worries: a. There was something seriously wrong with you (e.g., you might collapse, stop breathing or die)? (or) b. That you were going to lose control or go crazy? (or) c. That you would look silly or embarrass yourself?	
7. Have you either: a. Worried about having further panic attacks (or) b. Changed your behaviour to avoid further panic attacks?	
8. Would you like help with dealing with your panic attacks?	

31.2 DSM-5 diagnosis of panic disorder

	Present?
E. Recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four (or more) of the following symptoms occur: <i>(Note: the abrupt surge can occur from a calm state or an anxious state)</i> 14. Palpitations/pounding heart 15. Sweating 16. Trembling or shaking 17. Sensations of shortness of breath or smothering 18. Feelings of choking 19. Chest pain or discomfort 20. Nausea or abdominal distress 21. Feeling dizzy, unsteady, lightheaded, or faint 22. Chills or heat sensations 23. Numbness or tingling sensations (parasthesias) 24. Feelings of unreality (derealisation) or being detached from oneself (depersonalisation) 25. Fear of losing control or 'going crazy' 26. Fear of dying	
F. At least one of the attacks has been followed by one month (or more) of one or both of the following: a. Persistent concern or worry about additional panic attacks or their consequences (e.g., losing control, having a heart attack, 'going crazy') b. A significant maladaptive change in behaviour related to the attacks (e.g., behaviours designed to avoid having panic attacks, such as avoidance of exercise or unfamiliar situations)	
G. The disturbance is not attributable to the physiological effects of a substance or another medical condition.	
H. The disturbance is not better explained by another mental disorder.	

31.3 Psychological interview – areas to cover

Panic-related:

- The pattern of panic attacks (including whether panic disorder is the main problem, or whether the pattern of panic is better accounted for by another diagnosis).
- Description of panic attacks, particularly, their frequency and severity, associated bodily sensations, fearful thoughts, images, and safety behaviours (including examples of recent and severe panic attacks).
- Safety behaviours aimed at preventing or minimising catastrophic fears.
- The situations and activities associated with the occurrence of panic attacks.
- Patterns of avoidance (e.g., situations and activities).
- Factors which influence the severity of panic attacks (i.e., make them more or less manageable, better or worse).
- The young person's beliefs about the problem (including the potential implications of these beliefs on their motivation for and willingness to engage in treatment).
- The attitudes/beliefs and responses of family members, peers, school staff and significant others to the problem.
- Onset and course of panic attacks.
- Current or previous investigations and treatment for panic attacks.

Broader contextual information:

- Contextual information about the young person (including their family, interests, personal strengths, future aspirations).
- Risk/safeguarding issues (and management plan, if any risk issues are identified).
- The use of prescribed/non-prescribed medication.
- Alcohol and drug use.
- The presence of any physical health conditions and their current treatment.
- Presence/impact of any specific learning disabilities.
- Peer relationships (including any current and past bullying or other issues).
- School information (including whether they would like school to be contacted).
- Current or previous treatment for panic disorder or other mental health difficulties.
- The young person's willingness to engage in the treatment.

31.4 Panic self-report measures

PANIC DISORDER SEVERITY SCALE (PDSS-C)

Instructions: Several of the following questions refer to panic attacks and limited symptom attacks. For this questionnaire, a panic attack is defined as a sudden rush of fear or discomfort accompanied by at least four of the symptoms listed below. To qualify as a sudden rush, the symptoms must peak within 10 minutes. Episodes like panic attacks, but having fewer than four of the listed symptoms, are called limited-symptom attacks. Here are the symptoms to count:

- Rapid or pounding heartbeat
 - Sweating
 - Trembling or shaking
 - Breathlessness
 - Feeling of choking
 - Chest pain or discomfort
 - Nausea
 - Dizziness or faintness
 - Feelings of unreality
 - Numbness or tingling
 - Chills or hot flushes
 - Fear of losing control or going crazy
 - Fear of dying
-

For each of the following questions, circle the number of the answer that best describes your experience during the past week:

1. How many panic and limited-symptoms attacks did you have during the past week?

No panic or limited-symptoms episodes	0
Mild: No full panic attacks and no more than one limited-symptoms attack/day	1
Moderate: One or two full panic attacks and/or multiple limited-symptom attacks per day	2
Severe: More than two full attacks but not more than one per day on average	3
Extreme: Full panic attacks occurred more than once a day, more days than not	4

2. If you had any panic attacks during the past week, how distressing (uncomfortable, frightening) were they while they were happening? (If you had more than one, give an average rating. If you didn't have any panic attacks but did have limited-symptoms attacks, answer for the limited-symptom attacks)

Not at all distressing, or no panic or limited-symptom attacks during the past week	0
Mildly distressing (not too intense)	1
Moderately distressing (intense, but still manageable)	2
Severely distressing (very intense)	3
Extremely distressing (extreme distress during all attacks)	4

3. During the past week, **how much have you worried or felt anxious about when your next panic attack would occur**, or other fears related to the attacks (for example, that they could mean you have physical or mental health problems or could cause you social embarrassment)?

Not at all	0
Occasionally or only mildly	1
Frequently or moderately	2
Very often or to a very disturbing degree	3
Nearly constantly and to a disabling extent	4

4. During the past week, were there **any places or situations** (e.g. public transportation, cinemas, crowds, bridges, tunnels, shopping malls, being alone) **you avoided, or felt afraid of** (uncomfortable in, wanted to avoid or leave), because of fear of having a panic attack? Are there any other situations that you would have avoided or been afraid of if they had come up during the week, for the same reason? If yes to either question, please rate your level of fear and avoidance this past week.

None: No fear or avoidance	0
Mild: Occasional fear and/or avoidance, but I could usually confront or endure the situation. There was little or no modification of my lifestyle due to this.	1
Moderate: Noticeable fear and/or avoidance, but still manageable. I avoided some situations but I could confront them with a companion. There was some modification of my lifestyle because of this, but my overall functioning was not impaired	2

Severe: Extensive avoidance. Substantial modification of my lifestyle was required to accommodate the avoidance, making it difficult to manage usual activities 3

Extensive: Pervasive disabling fear and/or avoidance. Extensive modification in my lifestyle was required, such that important tasks were not performed 4

5. During the past week, were there any **activities** (e.g. physical exertion, taking a hot shower or bath, drinking coffee, watching an exciting or scary movie) **that you avoided, or felt afraid of** (uncomfortable doing, wanted to avoid or stop), because they cause physical sensations like those you feel during panic attacks or that you were afraid might trigger a panic attack? Are there any other activities that you would have avoided or been afraid of if they had come during the week, for that reason? If yes to either question, please rate your level of fear and avoidance of those activities this past week.

No fear or avoidance of situations or activities because of distressing physical sensations 0

Mild: Occasional fear and/or avoidance, but usually I could confront or endure with little distress activities that cause physical sensations. There was little modification of my lifestyle due to this 1

Moderate: Noticeable avoidance, but still manageable. There was definite, but limited, modification of my lifestyle, such that my overall functioning was not impaired 2

Severe: Extensive avoidance. There was substantial modification of my lifestyle or interference in my functioning 3

Extensive: Pervasive and disabling avoidance. There was extensive modification in my lifestyle due to this, such that important tasks or activities were not performed 4

6. During the past week, how much did the above symptoms altogether (panic and limited-symptom attacks, worry about attacks and fear of situations and activities because of attacks) **interfere with your ability to work, go to school, or carry out your responsibilities at home?** (If your work or home responsibilities were less than usual this past week, answer how you think you would have done if the responsibilities had been usual)

No interference with work or home responsibilities 0

Slight interference with work or home responsibilities, but I could do nearly everything I could do if I didn't have these problems 1

Significant interference with work or home responsibilities, but I still could manage to do the things I needed to do 2

Substantial impairment in work or home responsibilities; there were many important things I couldn't do because of these problems 3

Extreme, incapacitating impairment, such that I was essentially unable to manage any work or home responsibilities 4

7. During the past week, how much did panic and limited-symptoms attacks, worry about attacks, and fear of situations and activities because of attacks, **interfere with your social life?** (If you didn't have any opportunities to socialise this past week, answer how you think you would have done if you did have opportunities)

No interference 0

Slight interference with social activities, but I could do nearly everything I could do if I didn't have these problems 1

Significant interference with social activities, but I could manage to do more things if I made the effort 2

Substantial impairment in social activities; there are many social things I couldn't do because of these problems 3

Extreme, incapacitating, impairment, such that there was hardly anything social I could do 4

BODY SENSATIONS QUESTIONNAIRE – ADAPTED

Below is a list of specific body sensations that may occur when you are nervous or in a feared situation. **Please mark down how worried or afraid you are of these feelings.**

1. Heart beating fast or skipping a beat	Not at all	Slightly	Moderately	Very	Extremely
2. Pressure or a heavy feeling in my chest	Not at all	Slightly	Moderately	Very	Extremely
3. Numbness in my arms or legs	Not at all	Slightly	Moderately	Very	Extremely
4. Tingling in my fingertips	Not at all	Slightly	Moderately	Very	Extremely
5. Numbness in another part of my body	Not at all	Slightly	Moderately	Very	Extremely
6. Feeling short of breath	Not at all	Slightly	Moderately	Very	Extremely
7. Dizziness	Not at all	Slightly	Moderately	Very	Extremely
8. Blurred or distorted vision	Not at all	Slightly	Moderately	Very	Extremely
9. Feeling sick or nauseous	Not at all	Slightly	Moderately	Very	Extremely
10. Having 'butterflies' in my stomach	Not at all	Slightly	Moderately	Very	Extremely
11. Feeling a knot in my stomach	Not at all	Slightly	Moderately	Very	Extremely
12. Having a lump in my throat	Not at all	Slightly	Moderately	Very	Extremely
13. Wobbly or jelly legs	Not at all	Slightly	Moderately	Very	Extremely
14. Sweating	Not at all	Slightly	Moderately	Very	Extremely
15. A dry throat	Not at all	Slightly	Moderately	Very	Extremely
16. Feeling disoriented and confused	Not at all	Slightly	Moderately	Very	Extremely
17. Feeling disconnected from my body	Not at all	Slightly	Moderately	Very	Extremely
Other (please describe)					
	Not at all	Slightly	Moderately	Very	Extremely
	Not at all	Slightly	Moderately	Very	Extremely
	Not at all	Slightly	Moderately	Very	Extremely

AGORAPHOBIA COGNITIONS QUESTIONNAIRE - ADAPTED

This questionnaire has two parts. Below are some thoughts or ideas that may go through your mind when you are nervous or frightened.

a. Indicate how often each thought occurs when you are nervous; rate each thought from 1-5 using the scale below; put your rating on the **LEFT** hand side of each item.

1. Thought never occurs
2. Thought rarely occurs
3. Thought occurs during half of the times when I am nervous
4. Thought usually occurs
5. Thought always occurs when I am nervous

b. When you have the symptoms of panic, how much would you believe each of these thoughts to be true? Rate each thought by choosing a number from 0-100% (see the scale below), and put the number which applies on the line on the **RIGHT** hand side of the form.

0	10	20	30	40	50	60	70	80	90	100	
I do not believe this thought at all										I am completely convinced this thought is true	
a. How often do you have this thought? (Rate from 1-5)						b. How much do you believe this thought? (Rate from 0-100%)					
1)	___	I am going to be sick					___	%			
2)	___	I am going to pass out					___	%			
3)	___	I must have a brain tumour					___	%			
4)	___	I will have a heart attack					___	%			
5)	___	I will choke to death					___	%			
6)	___	I will look silly					___	%			
7)	___	I am going blind					___	%			
8)	___	I will not be able to control myself					___	%			
9)	___	I will lose control of my bladder or bowels					___	%			
10)	___	I will hurt someone					___	%			
11)	___	I am going to have a stroke					___	%			
12)	___	I am going to go crazy					___	%			
13)	___	I am going to scream					___	%			
14)	___	I am going to babble or talk funny					___	%			
15)	___	I will be paralysed with fear					___	%			
16)	___	I am about to die					___	%			
17)	___	I am seriously ill					___	%			
18)	___	I am going to suffocate					___	%			
		Other ideas not listed (please describe and rate)									
___	___	_____					___	%			
___	___	_____					___	%			
___	___	_____					___	%			

PANIC SAFETY SEEKING BEHAVIOURS QUESTIONNAIRE - ADAPTED

When you are at your most anxious or panicky, how often do you do the following things:

1. Try to think about other things	Never	Sometimes	Often	Always
2. Hold on to or lean on to something	Never	Sometimes	Often	Always
3. Hold on or lean on to someone	Never	Sometimes	Often	Always
4. Sit down	Never	Sometimes	Often	Always
5. Keep still	Never	Sometimes	Often	Always
6. Move very slowly	Never	Sometimes	Often	Always
7. Look for an escape route	Never	Sometimes	Often	Always
8. Avoid doing physical exercise	Never	Sometimes	Often	Always
9. Focus on what is going on in my body	Never	Sometimes	Often	Always
10. Try to keep control of my mind	Never	Sometimes	Often	Always
11. Try to keep tight control over my behaviour	Never	Sometimes	Often	Always
12. Talk more	Never	Sometimes	Often	Always
13. Use tablets/liquids/scents to reduce my physical sensations	Never	Sometimes	Often	Always
14. Ask people around for help	Never	Sometimes	Often	Always
15. Change my breathing	Never	Sometimes	Often	Always
16. Carry or drink water	Never	Sometimes	Often	Always
Please list other things you do when anxious/panicky				
17.	Never	Sometimes	Often	Always
18.	Never	Sometimes	Often	Always
19.	Never	Sometimes	Often	Always

THE MOBILITY INVENTORY - ADAPTED

Please indicate the degree to which you avoid the following places or situations because of discomfort or anxiety. Rate your amount of avoidance when you are with someone you trust (e.g., parent or friend) and when you are alone. If situations do not apply to you please circle 'not applicable'.

1. Cinemas	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
2. Supermarkets	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
3. Classrooms	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
4. School	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
5. Shops	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
6. Restaurants	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
7. Museums	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
8. Lifts	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
9. Arenas/stadiums	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
10. Car parks	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
11. High places	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable

12. Enclosed spaces (e.g. tunnels)	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
13. Open spaces outside (e.g. fields, wide streets)	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
14. Open spaces inside (e.g. large rooms, lobbies)	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
15. Going on buses	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
16. Going on trains	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
17. Going on underground/tubes	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
18. Going on aeroplanes	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
19. Going on boats	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
20. Going in (or driving) a car at any time	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
21. Going in (or driving) a car on motorways	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
22. Standing in lines	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
23. Crossing bridges	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable

	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
24. Parties or social events	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
25. Walking along a street	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
26. Staying at home alone		Never	Rarely	Sometimes	Mostly	Always	Not applicable
27. Being far away from home	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
28. Doing P.E.	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
29. Going swimming	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
Other (specify)							
	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	a. Accompanied	Never	Rarely	Sometimes	Mostly	Always	Not applicable
	b. Alone	Never	Rarely	Sometimes	Mostly	Always	Not applicable

SCORING FOR CLINICAL PURPOSES

Measure	Range for each item	Number of items contributing to score	Scoring	Min-Max	Scores for better outcomes
Panic Disorder Severity Scale-Children	0-4	7	Sum of all items.	0-28	Lower
Body Sensations Questionnaire-adapted	1-5	17	Sum of all items	17-85	Lower
Agoraphobia Cognitions Questionnaire-adapted	1-5 0-100	18 (frequency) 18 (beliefs)	Frequency: mean of all frequency items Frequency: mean of all belief items	1-5 0-100	Lower
Panic Safety Seeking Behaviours-adapted	0-3	16	Sum of all items	0-48	Lower
Mobility Inventory-adapted	0-4	29 (alone) 28 (accompanied)	Alone: mean of all alone items Accompanied: mean of all accompanied items	0-4 0-4	Lower

Clinical cut-offs

As far as we are aware, there are no clinical cut-offs for any of the above measures in adolescents. The clinical cut-off for the PDSS in adults is ≥ 8 , where a score of 8 or more is considered a clinical case.

31.5 Treatment planning checklist

Name:

Date:

Before the session	
Task	Completed
Review the results of the initial assessment (including diagnoses)	
Have copies of all materials • Workbook 1 (in colour if possible; copies for young person and parents/carers) • Questionnaires (PDSS, BSQ, ACQ, PSBQ, MI) • Folders for workbooks and materials • Consent form for audio/video recording sessions • Therapy contract/missed appointments policy	

During the session	
Task	Completed
Introductions (self, young person, and parent/carer if present)	
Set agenda and ask if there is anything the young person or parent/carer would like to add	
Reminder of confidentiality	
Feedback the results of the assessment (and check if anything has changed since assessment)	
Clarify or collect any further assessment information	
Review risk	
Explain and discuss treatment: • Principles of CBT • Brief cognitive therapy for panic, including parent/carer involvement in treatment	
Discuss if there is anyone else who should be involved in treatment (other parents/carers; school etc.)	
Review and sign the therapy contract/missed appointments policy	
Agree and record session times and dates (ideally for sessions 1-5)	
Give young person the following to complete and bring to next session: • Questionnaires • Workbook 1	
Give parent/carer: • Parent/carer workbook • Copy of Workbook 1	
Give them each a folder to keep all the session materials together	
Session feedback including completion/review of SRS	
Confirm next session time, date, and location	

After the session	
Task	Completed
Complete progress notes in electronic records	
Schedule diary appointments and book rooms for sessions	

31.6 Session 1 Checklist

Name:

Date:

Before the session	Completed
Ensure that the young person has received Workbook 1, questionnaires and panic diary to complete and bring to the session 1	
Ensure you are familiar with all the material and case examples from Workbook 1	
Copies of the following materials: • Workbook 2 (in colour if possible, two copies) and worksheets for specific beliefs • Questionnaires (PDSS and ACQ) • Goal progress sheet and session rating scale • Video/audio recorder (+consent form if not already completed)	

During the session	Completed
Introductions (self, young person, and parent/carer if present)	
Explain audio/video recording, complete consent form (if not already) and press 'record'	
Encourage the young person to record the session on their phone	
Set agenda and ask if there is anything the young person would like to add	
Explain confidentiality	
Agree involvement of parent/carer in sessions	
Review questionnaires, risk and recent panic attacks (panic diary)	
Review Workbook 1 • Review the individualised model (page 14) and ensure understanding of how their thoughts and sensations contribute to the vicious cycle	
Start to gather evidence for feared outcomes (e.g., whether they have ever happened)	
The role and effects of anxiety and physical symptoms caused by anxiety (using worksheets for specific beliefs)	
Start to gather evidence through in-session behavioural experiments (e.g., Paired Associates worksheet)	
Goal setting (using the goal progress sheet)	
Plan and make a record of between-session activities	
Give young person the following to complete and bring to next session: • Questionnaires ○ Young person: PDSS-C, ACQ, RCADS-C ○ Parent/carer: RCADS-P • Workbook 2 (+ copies for parents/carers) • Relevant additional worksheets • Behavioural experiment sheets	
Check the young person has a folder to keep all the session materials together and ask them to bring the folder to every session	
Session feedback including completion/review of SRS	
Photocopy/photograph completed Workbook 1 and return to young person	
Confirm next session time, date, and location	

After the session	Completed
Complete progress notes in electronic records (including ideas for the next session)	
Upload questionnaires, copy of completed Workbook 1 to electronic records	
Upload video/audio recording and delete from device	
Schedule diary appointment and book room for next session	
Make a note of specific issues to discuss in supervision	

31.7 Session 2 Checklist

Name:

Date:

Before the session	Completed
Ensure that the young person has received Workbook 2 and questionnaires to complete and bring to the next session	
Ensure you are familiar with all the material and case examples from Workbook 2	
Copies of the following materials: • Workbook 3 (in colour if possible, two copies) and worksheets for specific beliefs • Questionnaires (PDSS, BSQ, ACQ, PSBQ, MI) • Behavioural experiments record sheets (multiple copies) • Goal progress sheet and session rating scale Video/audio recorder	

During the session	Completed
Press 'record' on audio/video recorder	
Encourage the young person to record the session on their phone so they can listen back to the session	
Set agenda and ask if there is anything the young person would like to add	
Brief catch-up (including panic attacks and panic diary; goals)	
Review questionnaires and risk	
Review Workbook 2 • Check they have completed the selective attention experiment and complete in session if not	
Review between session tasks	
Building an alternative explanation – Theory A and B	
In-session behavioural experiments – using record sheet	
The builder's apprentice metaphor (if helpful)	
Plan and make a record of between-session activities	
Give young person the following to complete and bring to next session: • Questionnaires • Workbook 3 (+ copies for parents/carers) • Relevant additional worksheets • Behavioural experiment sheets	
Session feedback including completion/review of SRS	
Photocopy/photograph completed Workbook 2/other materials and return to young person	
Plan and confirm next session time, date, and location	

After the session	Completed
Complete progress notes in electronic records	
Upload questionnaires, copy of completed Workbook 2 to electronic records	
Upload video/audio recording and delete from device	
Schedule diary appointment and book room for next session	
Make a note of specific issues to discuss in supervision	

31.8 Session 3 Checklist

Name:

Date:

Before the session	Completed
Ensure that the young person has received Workbook 3 and questionnaires to complete and bring to the next session	
Ensure you are familiar with all the material and case examples from Workbook 3	
Copies of the following materials: • Workbook 4 (in colour if possible, two copies) and worksheets for specific beliefs • Questionnaires (PDSS and ACQ) • Behavioural experiments record sheets (multiple copies) • Goal progress sheet and session rating scale Video/audio recorder	

During the session	Completed
Press 'record' on audio/video recorder	
Encourage the young person to record the session on their phone so they can listen back to the session	
Set agenda and ask if there is anything the young person would like to add	
Brief catch-up (including panic attacks and panic diary; goals)	
Review questionnaires and risk	
Review Workbook 3	
Review between session tasks	
In-session behavioural experiments – using record sheet	
Plan and make a record of between-session activities	
Give young person the following to complete and bring to next session: • Questionnaires • Workbook 4 (+ copies for parents/carers) • Relevant additional worksheets • Behavioural experiment sheets	
Session feedback including completion/review of SRS	
Photocopy/photograph completed Workbook 3 and return to young person	
Plan and confirm next session time, date, and location	

After the session	Completed
Complete progress notes in electronic records	
Upload questionnaires, copy of completed Workbook 3 to electronic records	
Upload video/audio recording and delete from device	
Schedule diary appointment and book room for next session	
Make a note of specific issues to discuss in supervision	

31.9 Session 4 Checklist

Name:

Date:

Before the session	Completed
Ensure that the young person has received Workbook 4 and questionnaires to complete and bring to the next session	
Ensure you are familiar with all the material and case examples from Workbook 4	
Copies of the following materials: • Worksheets for specific beliefs • Questionnaires (PDSS, BSQ, ACQ, PSBQ, MI) • Behavioural experiments record sheets (multiple copies) • Goal progress sheet and session rating scale • Therapy blueprint Video/audio recorder	

During the session	Completed
Encourage the young person to record the session on their phone so they can listen back to the session	
Set agenda and ask if there is anything the young person would like to add	
Brief catch-up (including panic attacks and panic diary; goals)	
Review questionnaires and risk	
Review Workbook 4	
Review between session tasks	
In-session behavioural experiments – using record sheet	
Plan and make a record of between-session activities	
Give young person the following to complete and bring to next session: • Questionnaires • Relevant additional worksheets • Behavioural experiment sheets • Therapy blueprint	
Session feedback including completion/review of SRS	
Photocopy/photograph completed Workbook 4 and return to young person	
Plan and confirm next session time, date, and location	

After the session	Completed
Complete progress notes in electronic records	
Upload questionnaires, copy of completed Workbook 4 to electronic records	
Upload video/audio recording and delete from device	
Schedule diary appointment and book room for next session	
Make a note of specific issues to discuss in supervision	

31.10 Session 5 Checklist

Name:

Date:

Before the session	Completed
Ensure that the young person has received questionnaires to complete and bring to the next session	
Copies of the following materials: • Worksheets for specific beliefs • Questionnaires (PDSS, BSQ, ACQ, PSBQ, MI) • Behavioural experiments record sheets (multiple copies) • Goal progress sheet and session rating scale • Spare therapy blueprint Video/audio recorder	
Ensure that the young person has received questionnaires to complete and bring to the next session	

During the session	Completed
Encourage the young person to record the session on their phone so they can listen back to the session	
Set agenda and ask if there is anything the young person would like to add	
Brief catch-up (including panic attacks and panic diary; goals)	
Review questionnaires and risk	
Review between session tasks	
Review therapy blueprint	
In-session behavioural experiments – using record sheet	
Plan and make a record of between-session activities and how to manage booster period	
Give young person the following to complete and bring to next session: • Questionnaires • Relevant additional worksheets • Behavioural experiment sheets	
Session feedback including completion/review of SRS	
Photocopy/photograph completed therapy blueprint and return to young person	
Plan and confirm next session time, date, and location	

After the session	Completed
Complete progress notes in electronic records	
Upload questionnaires to electronic records	
Upload video/audio recording and delete from device	
Schedule diary appointment and book room for next session	
Make a note of specific issues to discuss in supervision	

31.11 Booster 1 Checklist

Name:

Date:

Before the session	Completed
Copies of the following materials: • Worksheets for specific beliefs • Questionnaires (PDSS, BSQ, ACQ, PSBQ, MI) • Behavioural experiments record sheets (multiple copies) • Goal progress sheet and session rating scale • Therapy blueprint Video/audio recorder	

During the session	Completed
Encourage the young person to record the session on their phone so they can listen back to the session	
Set agenda and ask if there is anything the young person would like to add	
Brief catch-up (including panic attacks and panic diary; goals)	
Review questionnaires and risk	
Review between session tasks	
Review therapy blueprint	
In-session behavioural experiments – using record sheet	
Plan and make a record of between-session activities and how to manage booster period	
Give young person the following to complete and bring to next session: • Questionnaires • Relevant additional worksheets • Behavioural experiment sheets	
Session feedback including completion/review of SRS	
Photocopy/photograph completed therapy blueprint and return to young person	
Plan and confirm next session time, date, and location	

After the session	Completed
Complete progress notes in electronic records	
Upload questionnaires to electronic records	
Upload video/audio recording and delete from device	
Schedule diary appointment and book room for next session	
Make a note of specific issues to discuss in supervision	

31.12 Booster 2 Checklist

Name:

Date:

Before the session	Completed
Copies of the following materials: • Worksheets for specific beliefs • Experience of service questionnaire (copies for young person and parent/carer) • Behavioural experiments record sheets (multiple copies) • Goal progress sheet and session rating scale • Therapy blueprint Video/audio recorder	

During the session	Completed
Encourage the young person to record the session on their phone so they can listen back to the session	
Set agenda and ask if there is anything the young person would like to add	
Brief catch-up (including panic attacks and panic diary; goals)	
Review questionnaires and risk	
Review between session tasks	
In-session behavioural experiments – using record sheet	
Review progress in treatment overall (e.g., graphs of questionnaire scores)	
Review therapy blueprint and plan for the future	
Confirm plan going forward (e.g., report/discharge)	
Session and treatment feedback including completion/review of SRS and ESQ	
Photocopy/photograph completed therapy blueprint and return to young person	

After the session	Completed
Complete progress notes in electronic records	
Upload questionnaires and therapy blueprint to electronic records	
Upload video/audio recording and delete from device	
Schedule diary appointment and book room for next session	
Make a note of specific issues to discuss in supervision	

32 Explanations for common bodily sensations in a panic attack

The following section provides therapists with more detailed information about common bodily sensations. The most important thing to know about the sensations that people get in panic attacks is that they are harmless. Young people often haven't had a chance to discover this because of their avoidance and use of safety behaviours. The focus in therapy is helping them to discover this. Sometimes people may want an explanation for a specific sensation (beyond knowing that it is one of many sensations that are commonly experienced due to anxiety). In these cases, some of the information below can be helpful.

We would not suggest providing *all* this information to the young person as may lead them to be more concerned about their health. This page should not be given out to young people in therapy – information about common bodily sensations is contained within the workbooks and the individual worksheets for specific beliefs that the young person is given.

Breathing in panic attacks

When you take a breath in, you introduce oxygen into the lungs. When you breathe out, carbon dioxide (which is a waste product) is released. Normally, the respiratory system keeps the levels of oxygen and carbon dioxide in balance. Most of the physical symptoms in panic attacks (e.g., feeling dizzy/light-headed, tingling in the hands and feet, numbness, and sweating) are caused by over breathing/hyperventilation (either too fast and/or too deep) and levels of carbon dioxide in the lungs dropping. This causes the blood to become more alkaline, which triggers many of the harmless physical sensations ('respiratory alkalosis') (Brinkman & Sharma, 2021).

Heart palpitations/racing

When we are anxious and the heart is beating fast, the body is reacting in a normal way to the perception of danger. Most bodily sensations are designed to help our prehistoric human ancestors deal with threats such as being approached by a hungry tiger. To run, you need the maximum amount of energy in your muscles and so your heart works harder to pump blood to get oxygen to your muscles and to open the valves to let more blood through. Other non-anxiety factors can also cause a racing heart such as exercise, smoking, caffeine, excitement, anger, embarrassment.

Dizziness/light-headedness

To run, you need the maximum amount of energy in your muscles and relatively less to the brain so there is a small drop in oxygen to the brain, which causes the feeling of dizziness or faintness. This is also caused by over-breathing. It is a feeling of light-headedness but generally does not mean that you are in danger of fainting. To faint, you need a marked blood pressure drop. Heart rate and blood pressure tend to go up when we are anxious.

Shortness of breath

Shortness of breath relates to the fight or flight response. In response to this, it is common for the person to try to take in more air and take rapid or deep breaths, which can lead to a further shortness of breath, racing heart, tingling and dizziness.

Shaky or wobbly legs

Shaky or wobbly legs are due to the normal stress response, as the body enters a fight or flight state. Adrenalin causes blood to be pumped into the legs and the muscles to be in a constant state of tension to be ready to run. This can lead to the legs feeling shaky, wobbly, or weak. Trying to control any shaking by tensing muscles typically makes it worse.

Sweating

You sweat when you are nervous because your body perceives you may have to begin moving quickly and sweating cools down the body so that you do not overheat.

Nausea/knot or butterflies in stomach

The blood in your stomach is getting pumped to other parts of your body as part of the normal fight-flight response. This slight reduction in stomach blood levels is part of the reason for butterflies/knot in the stomach.

Chest pain (pressure/heavy feeling)

Chest pains or feelings of pressure or heaviness are typically due to harmless muscle spasms. There are lots of muscles in your chest, between each pair of ribs, which can start to ache if you breathe in a tense way. This tends to persist for a while even when they relax. This is due to a sort of cramp in the muscles between the ribs. Any muscle held tensely for any length of time tends to start to ache. When you are anxious you probably do not relax your chest between breaths but breathe in and out in a tense and shallow way. This can also be caused by posture – such as sitting in a slumped way.

Numbness in parts of the body

Numbness in some parts of the body is one of the symptoms of anxiety. It is caused by the slight, harmless, reduction in blood flow as one's blood is redistributed to the muscles to get ready to flee or fight as well as over-breathing. It may also be caused by remaining in the same position (seated or standing) for a long time.

Tingling (parasthesias) or pins/needles in fingertips

Pins and needles may occur particularly around the lips and fingertips when anxious and is often related to over-breathing.

Feeling disoriented/confused

Feeling disoriented or confused can be caused by trying to control or suppress thoughts.

Feeling that things are unreal

Sometimes individuals who are prone to panic attacks worry that the world around them or they themselves seem somewhat unreal. They often respond by checking. For example, staring fixedly at an object without moving their eyes around can make it seem less real and less three-dimensional. Similarly, staring at a part of one's body without moving the eyes around can make it appear less real. These are normal perceptual processes. Usually, we move our eyes around all the time and this continual scanning is one of the things that helps us construct a solid-looking three-dimensional world.

Sometimes people also notice visual patterns that seem to shimmer or wave. This can for example occur if one focuses on closely spaced metal lines on escalator steps.

Feeling that things are unreal can also be caused by automatic, protective reflex to stop you feeling overwhelmed with emotion and unable to function when perceived to be under threat.

33 Common negative thoughts (feared outcomes) in panic disorder and interventions that can be useful for modifying the thoughts

These are taken from Clark & Salkovskis (2009).

1. I'll faint

- Identify what the person means by, 'I'll faint'.
- Have they fainted before? If so, identify circumstances. Refer to worksheet 'Will I faint when I feel anxious' for education options, depending on their answer.
- Consider paired associates experiment (section 19.1.1) to demonstrate that thoughts about fainting increase dizziness/feeling faint.
- Consider hyperventilation experiment (section 19.1.2) to identify whether their breathing during attacks increases the feeling of faintness/dizziness.
- Explore whether their other safety behaviours (e.g., walking style), diet (restricted eating) or medications might intensify the feeling of faintness/unsteadiness.
- Identify images and restructure (see section 18).
- Behavioural Experiment: Explore whether feeling faint in a panic leads to actually fainting by inducing the feeling (by paired associates, hyperventilation, exposure to feared situation such as a supermarket) and not attempting to control it (dropping safety behaviours) or even making it worse.
- Behavioural Experiment: If concern about other people's reactions to them fainting is prominent, (1) explore concern and verbally decatastrophise ("What's so bad about fainting?") and (2) discover how people would react by observing therapist "faint" in public after making clear cut predictions.

2. I'm having a heart attack

- Identify the person's evidence for the belief. Discuss previous negative medical tests (if applicable) and the fact that they haven't died despite having had many attacks. Identify alternative explanation for attacks (the cognitive model) and any evidence that fits with the alternative (e.g., effects of distraction, course of the disorder, relation of chest pain to exercise, etc. See worksheet 'Why do I get chest pains and is there something wrong with my heart?'). Collaboratively discuss and discount evidence that seems to support the negative belief (e.g., left sided chest pain, see pages 32-33 in Clark & Salkovskis, 2009).
- Behavioural Experiments to induce feared symptoms: paired associates (section 19.1.1); breathing with tense, expanded, or collapsed upper chest (section 19.1.3).
- Behavioural Experiments to demonstrate sensations are not dangerous: try to provoke a "heart attack" by exercising. When breathlessness/racing heart/chest tightness is experienced (either because of exercise or in naturally occurring attack) do not rest or engage in any other safety behaviour to reduce the symptoms. Consider exaggerating the symptoms by more exercise.
- Drop changes in lifestyle (e.g., not exercising, repeated checking of the heart with blood pressure or pulse devices) that started after onset of panic disorder and are motivated by the belief that panic attacks are heart attacks or 'near misses'.

3. I'm going crazy / losing control

- Identify what the person thinks going crazy or losing control would consist of. What would happen? What would other people see? How long would it last?
- Identify what makes the patient think the feared outcome is likely to happen (e.g., subjective difficulty in controlling thoughts/images/emotions or in concentrating; periods of feeling unreal; subjective feeling that urges have to be resisted; mental health/behavioural history of significant others) and the alternative explanation (cognitive model).
- Identify monitoring and checking (of thoughts, whether they or the world is real, whether they are 'in control', etc).
- Education: panic disorder is not associated with an increased risk of psychosis.
- People who appear to lose control of their behaviour in public (screaming etc.) do not suffer from panic disorder.
- Explore why they think they haven't gone mad yet (what safety behaviours do they think have stopped them? Remember: safety behaviours are often mental operations: e.g., thought/image suppression or control).
- Behavioural experiments: 1) induce feelings of unreality in self or world by fixedly staring at parts of their body, visual grids, or blank walls (worksheet 'Why do things sometimes start to shimmer or move in front of my eyes'). Paired associates may also induce feelings of unreality (19.1.1); 2) demonstrate the adverse effects of monitoring/checking by doing so in the session and observing its effects; 3) demonstrate the adverse effects of trying to keep tight control of your thoughts/images/behaviour by doing so in the session and discovering that things feel more 'out of control'; 4) try to lose control/go crazy in the session and discover that it doesn't happen; observe the way other people would react if the worse happened and they behaved as they feared by them or the therapist 'acting' the behaviour (page 50 of Clark & Salkovskis, 2009).

4. I'll vomit, lose control of my bladder, lose control of my bowels

- Identify meaning of feared event ('what would be the worst thing about that?').
- Has the feared event ever happened? If yes, explore the circumstances to see if it was unconnected to panic attacks/ there was a good non-panic reason (e.g., food poisoning, illness, excitement, etc). If no, what does that tell you about how likely it is to happen in a panic?
- Identify any additional evidence the person has for believing the feared event is likely (e.g., feeling nauseous, urgency feelings, observing other people vomit/lose bladder-bowel control. Also 'near misses', that is times when they felt a strong urge to vomit/urinate/defecate and rushed to bathroom whereupon the event happened with some force). Discuss alternative interpretations of the evidence (e.g., feelings of nausea/urgency may be magnified by internally focused attention and attempts to tense the relevant muscles to prevent vomiting or 'leakages'. Also, the fact that forceful urination/defecation happened when the patient reached the toilet didn't indicate 'near miss' loss of control. On the contrary, defecation happened because the patient intentionally let go once they were safely on the toilet).

- Education: e.g., our substantial bladder capacity, feeling nauseous often does not predict vomiting, except in illnesses like gastric flu and transitory conditions such as severe hangovers or food poisoning.
- Identify and change any behaviours that might increase nauseous feelings directly (not eating or problematic dietary content) or increase attention to stomach/bowels/bladder (multiple 'preventative' trips to toilet, checking how nauseous they feel, repeated checking of urinary/defecatory urge, planning routes around the location of toilets).
- Behavioural experiments: 1) Intentionally monitor strength of urinary/defecatory urges or nausea in session to demonstrate that monitoring increases the feelings (but not the biological need); 2) Experiment with drinking/eating more and intentionally delaying going to toilet to demonstrate that urges increase but then often decline; 3) Go to places without checking location of toilets in advance and not seeking one out at the first sign of an urge. Cognitive preparation for this exercise might require a cost-benefit analysis (i.e., is it worth risking the worst happening once if it allows you to overcome the problem forever?); 4) Decatastrophise the social cost of the feared event by giving the appearance it may have occurred (fake vomiting in public or putting water on their trousers/skirt) and observe other's reactions.

5. I'll suffocate / stop breathing and die

- Identify what makes the person think they might suffocate/stop breathing in a panic attack (e.g., feeling short of breath, stories they have heard, confusing asthma and panic attacks, etc.).
- Discuss why they think they have not suffocated/stopped breathing in previous attacks (e.g., made a conscious effort to breathe, took deep breaths, escaped from the situation, tried to calm down, etc.).
- Education about breathing: it is mainly automatic (driven by the respiratory centre) but with a degree of voluntary control (to allow us to sing, talk etc) except when breathing has been delayed until CO² levels become high at which point a reflex forces us to breathe. Reflex control completely takes over when we are sleeping or unconscious.
- Behavioural experiments: 1) Ask them to breathe the way they do in panic attacks to see if trying to take in more air makes them feel more breathless even though their oxygen levels are increasing (see hyperventilation experiment (part 1), section 19.1.2). If so, explain about hyperventilation; 2) Encourage them to intentionally hold their breathe until the breathing reflex takes over (worksheet ') to demonstrate that you don't have to concentrate on breathing in order to ensure that you continue to breathe. The therapist may need to model this exercise to reduce their fears enough to allow them to do the experiment themselves; 3) Paired associates (section 19.1.1) to demonstrate that fearful thoughts about suffocating can make you feel short of breath, even though there is no objective change in respiration; 4) Intentionally focus on how breathless you feel in order to demonstrate that concerned monitoring can make you feel breathless even though there is no objective change in respiration; 5) Smell experiment (worksheet 'Is it possible to run out of air and faint in a stuffy room?') to demonstrate that you will not run out of air even if stuck in a confined space (such as a lift/elevator or a small room).

6. The anxiety/stress of panic attacks will kill me

- Identify the person's evidence for the belief (e.g., common sayings, movies, things they have experienced or things they have read and misinterpreted) and help them to challenge the evidence.
- Education about the physical effects of stress and panic. Some points that may be relevant are: 1) The literature linking stress reactions with increased mortality implicates chronic negative affect (especially hostility and depression) with increased long-term cardiovascular risk. The mechanism is probably structural damage to the cardiovascular system because of chronically elevated blood pressure or some other fairly constant physical corollary. In contrast, panic attacks are brief events. 2) The heart is a muscle and benefits from exercise. It is good to give it the experience of sudden accelerations (which is one reason why exercise is recommended by health experts). 3) The objective physiological changes in a panic attack seem large to patients but ambulatory monitoring studies show they are modest (average heart rate increase of 11 beats per minute: see Margraf et al., 1987) in comparison to many everyday events such as jogging, running up the stairs etc. 4) Some people have heart attacks when in an anxious state but the anxiety per se is not the cause of the attack. Instead, they are individuals with pre-existing cardiac disease and the any cardiac load (such as turning over a mattress at home) could have the same effect.
- Behavioural Experiments: 1) Identify safety behaviours linked to the belief (e.g., avoiding scary movies, rollercoaster rides, stressful interactions with colleagues, or any other stressors in life) and encourage patient to do the opposite (go to a scary movie/roller coaster ride) in order to disconfirm the belief. 2) Encourage them to try to make themselves more anxious or to not control their anxiety in a panic as a specific test of the belief. This experiment is usually best done in the therapy session first using one of the standard panic provocation techniques or using scary imagery. The key point is that, with the therapist's encouragement, patients intentionally allow themselves to become anxious and discover the anxiety has no adverse effects even if not controlled. Drop changes in lifestyle (e.g., exercise, repeated checking of the heart with blood pressure or pulse devices) that started after onset of panic disorder and are motivated by the belief that panic attacks are heart attacks or 'near misses'.

7. I'll choke

- Identify: 1) key sensations (lump in throat, difficulty in breathing); 2) what choking means to the person (food sticking/being inhaled/throat closing up) and what they fear will happen if they choke (look silly, die); 3) evidence that the sensations mean that you are choking
- Identify safety-seeking behaviours (swallowing frequently, tensing throat, over-chewing and careful swallowing).
- Discuss any direct or indirect experience of choking in self or others (e.g., fishbone stuck in gullet) and how unlikely this is.
- Education: Discuss how food and air are kept separate by a 'trapdoor' inside the throat which routes food and water into the stomach rather than the lungs. The 'trap door' also

responds to work about choking (producing the typical 'lump in throat' feeling which simply means that the body's means of protection against things going the 'wrong way' is in good working order but is being triggered unnecessarily).

- Behavioural experiments: Do what you usually do when worried about choking (e.g., swallow more, tense the throat) to discover that the safety behaviour is one of the main causes of the feared sensations. Try to trickle water down your throat without swallowing to show that the swallow reflex will take over and ensure that the water reaches the stomach. Therapist to explain the swallowing reflex. Discuss coughing: what does it do? (it very effectively throws food out of the windpipe). Cough into a rolled-up piece of paper tube with something in it (a pencil for example) to see how effective the cough is at expelling the object (the principle behind a 'pea-shooter').

34 Example of a completed behavioural experiment record sheet

Date	Situation	Prediction	Experiment	Outcome	What I learned
		What do you think will happen? How would you know if it had? Rate your beliefs (0-100%)	What will you do to test the prediction? <i>(Remember to focus on what actually happens rather than your feelings or sensations and let go of safety behaviours)</i>	What actually happened? Were the predictions correct?	What did you learn? How likely is it that your predictions will happen in the future? Re-rate your beliefs (0-100%) What can you do to further test your original prediction?
24/07	At the clinic	If I exercise and feel lightheaded, I will pass out (80%)	Bring on lightheaded, dizzy sensations by running up and down 3 flights of stairs. Keep going when normally I would stop and don't do anything to stay safe: • Don't hold onto the banister • Don't drink water	When I felt lightheaded and dizzy, I started to feel anxious but I kept going and didn't pass out. My prediction was not correct 😊	I learned that the lightheadedness doesn't mean I am going to pass out. Just because I feel it doesn't mean it's going to happen. When I am dancing, I can push through and not hold back. My belief that I will pass out is now 20% I can keep bringing on the sensations by doing some quick, deep breaths to keep testing my predictions.

35 Example of a completed flashcard

Side one:

Thoughts:

I won't be able to control myself

They will think I'm crazy

Side two:

Remember:

This isn't me losing control or going crazy - I'm just feeling anxious and that's causing these sensations of things seeming unreal.

No-one is noticing - everyone is much more focused on what they are doing.

Look out for and drop any safety behaviours - this will break the cycle and help me believe that there is nothing wrong.

Remember my experiment in the chemistry lesson:

- I didn't try to control what I was thinking or doing, didn't check for other people's reactions and stayed in the lesson.
- I didn't lose control, no-one noticed and my beliefs in the thoughts went down.

36 Example of a completed therapy blueprint

1. How did the problem develop?

Started when I fell out with a friend, and I experienced a racing heart, felt nauseous and bit dizzy. I started to worry about these feelings and there being something wrong with me.

2. What kept it going?

I was using my sensations as evidence for there being something wrong with me. This made me worry even more and brought on more physical sensations and made me even more convinced there was something wrong. It was basically a huge vicious cycle.

I tried to deal with this by doing safety behaviours and leaving situations – but this didn't help because it stopped me from discovering that the sensations are harmless, that they will go away, and I can cope with them.

3. What were the main body sensations that bothered you and how did you interpret them?

Physical sensations	Interpretation/Meaning	
	Before	After
Feeling sick	I'm going to throw up	I'm not going to throw up. I demonstrated that to myself – I stuck with the feelings and didn't end up throwing up.
Numbness and wobbliness in legs	Going to collapse	I'm not about to collapse. I found that these sensations are harmless and just a normal anxiety response.
Lightheaded	Going to pass out	I'm not about to pass out. My pulse was racing and my blood pressure was up. You

		need a drop in blood pressure to pass out.
Shortness of breath	Stop breathing	I'm not about to stop breathing. It's due to fight/flight response and me changing my breathing.
Heart beating fast	Heart problem	This isn't due to anything being wrong with my heart. It's just due to anxiety - my body is getting ready to run and this is a normal response that everyone gets when feel they are in danger!
Tight chest	Heart or lung problem	I don't have a heart or lung problem. My chest muscles are tight as I'm breathing in tense way.
Can't focus/vision blurry	Eye problem or going crazy	There is nothing wrong with my vision - it's due to me staring at things as a safety behaviour.
Feeling out of it	Going crazy/look silly	I'm not going crazy and don't look silly. Everyone experiences this feeling at times. When I looked at other people's reactions, I could see that nobody notices or seems concerned about what's happening to me.

4. What did you learn in therapy that was useful?

- Not to use feelings as evidence.
- You cannot pass out when your pulse is racing.
- Panic attacks are caused by fear of something and are kept going by adrenaline going into the bloodstream which leads to a high pulse, sweating, and breathing harder.
- Feeling dizzy or lightheaded is caused through more blood going to the muscles for either fight or flight to happen.
- Focusing attention on symptoms make them worse and makes you believe that there is something seriously wrong.
- Avoiding doing things and safety behaviours keeps the problem going - make you believe that they are the difference between something bad happening and not.
- During an attack, it is best not to try to stay safe - it is best to push on through it and try not to do anything to control the sensations.

5. What were your most unhelpful thoughts, assumptions or predictions? What alternative explanations did you find for them?

Unhelpful thoughts, assumptions or predictions	Alternative explanations
I'm going crazy	I'm not going crazy or losing my mind. This is all normal. I've been thinking that you should be able to control your thoughts but that's not possible. I've learned that the more I try to get control of my thoughts, the more out of control I feel.
I'll look silly	I don't look silly. It's normal to have this worry but when you actually take notice of other people, you find that no-one notices what's going on or seems concerned.
I'm going to collapse or pass out	I'm not about to collapse or pass out. My lightheaded feeling is due to the fight/flight response and me hyperventilating - I won't pass out when I'm anxious because my blood pressure goes up and my heart beats faster. This is the opposite of what happens when you pass out.

6. What safety behaviours did you do when you were frightened? Why might these be unhelpful? What would be an alternative way to behave when you feel frightened?

Safety behaviours:

- Left my lesson and went to toilet (sat in a cubicle by the toilet).
- Drank sips of water.
- Counted my breathing in and out.
- Tried to think about other things.
- Stared at a point to try to ground myself and be aware of what was going on.

These were unhelpful because they made these sensations seem more significant than they really are. They also made me believe that they were the only thing stopping my worst fears from coming true. I didn't get to find out that actually they didn't do anything (except make things worse).

7. Describe the most helpful behavioural experiments and what you learnt from them – both in the sessions and outside them.

- Hyperventilation experiments - Learned that I hyperventilate when I feel short of breath and this actually causes a lot of the sensations (like feeling lightheaded, wobbly and out of it)
- Ran up and down the stairs and jogged around the park - I can push myself so my heart is really beating fast and I don't collapse. After a while things settle down and it gets easier.
- Going on the tube in London - it's normal for people to glance at each other but doesn't mean they are judging me or think I'm crazy.
- Going into a café and ordering a drink after bringing on the sensations - the person didn't act like I was crazy - they acted normally and were friendly.

8. How can you continue to build on what you have learned?

- Don't leave or avoid situations where I've previously felt panicky - keep going into them and making sure I'm not doing anything to try to control the feelings.

9. How will you deal with panic attacks or panicky thoughts and feelings in the future?

- I will look out for any worried thoughts, like that I am going to collapse or go crazy.
- I will remind myself of how the panic works and how by focusing on the sensations it makes them worse and makes you believe that there is something seriously wrong.
- I will remind myself of all the behavioural experiments that I've done and that I learned that my predictions did not come true and that I did not need to do anything to stay safe.
- I will carry on pushing myself to do things and make sure that I don't do anything to try to control the sensations.
- I could carry out more behavioural experiments to test out any worried thoughts, reinforce what I have learned and show myself that the sensations are harmless and nothing bad is going to happen.

10. What can other people (e.g., family, friends and staff at school) do to help you going forwards?

- Support me if I'm feeling stressed and help me think about ways, I can deal with the thing that is making me stressed.
- If I am getting panicky, ask me what I learned to do in sessions.
- Encourage me not to do anything to try to control it or stay safe.
- Remind me to look back through my therapy folder if I am having panicky feelings.

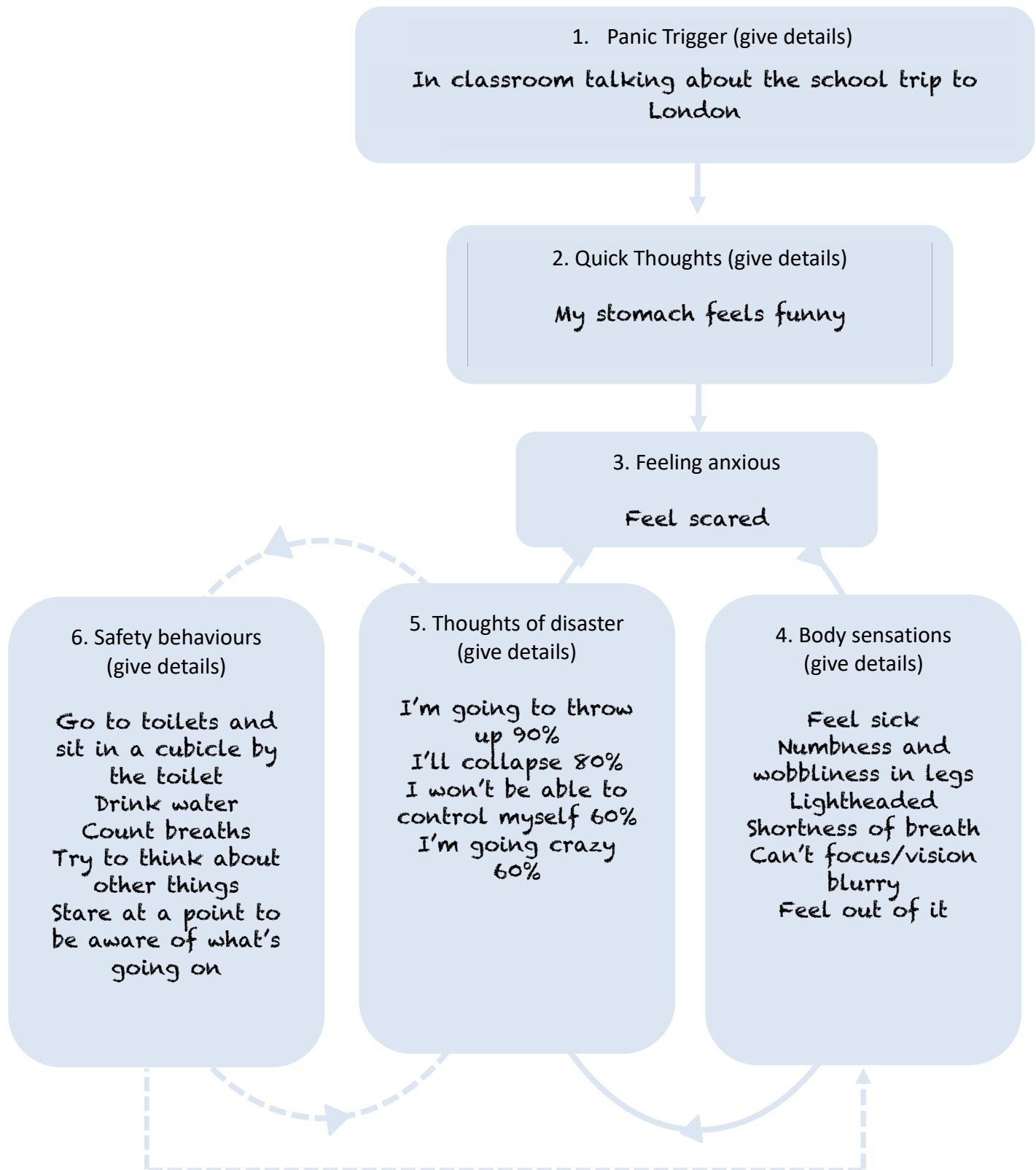
11. What could cause a setback and how will you deal with it?

- Falling out with friends
- Build up to exams - feeling stressed and fed up about having to revise
- Starting a new job and not knowing how it works and if I'm doing things right

Remember that everyone experiences anxiety about things and gets these sensations. They are normal and I can expect to get them. But rather than focusing on them and thinking that they mean something bad will happen, I'll remember that these are the same feelings as when I'm excited. Nothing bad will happen. I just need to not focus on them or try and control them in any way - just let them come and go.

12. On the following page there is a space for you to draw your panic model.

My Panic Model



37 Competence frameworks

These frameworks indicate the various areas of activity that, taken together, represent good clinical practice. These can be downloaded from the website of the Centre for Outcomes, Research and Effectiveness (CORE) (www.ucl.ac.uk/CORE).

37.1.1 Competence framework for CBT for depression and anxiety

<https://www.ucl.ac.uk/pals/research/clinical-educational-and-health-psychology/research-groups/core/competence-frameworks-8>

Overview of the competence framework for CBT for depression and anxiety – background documentation for clinicians and commissioners:

https://www.ucl.ac.uk/pals/sites/pals/files/background_document_supervision_competences_july_2015.pdf

Map of CBT competences for depression and anxiety: <https://www.ucl.ac.uk/clinical-psychology/competency-maps/cbt-map.html>

37.1.2 Competences for panic disorder (from CBT competencies map)

<https://www.ucl.ac.uk/clinical-psychology/competency-maps/cbt/Problem%20specific%20competences/Panic%20Disorder%20-%20Clark%20model.pdf>

37.1.3 Competence framework for psychological interventions in child and adolescent mental health services (CAMHS)

<https://www.ucl.ac.uk/pals/research/clinical-educational-and-health-psychology/research-groups/core/competence-frameworks-11>

Overview of the competence framework for psychological interventions in CAMHS – background documentation for clinicians and commissioners:

https://www.ucl.ac.uk/drupal/site_pals/sites/pals/files/migrated-files/CAMHS_Clinician_Competences_Framework_V1_2_.pdf

Map of CAMHS competences: <https://www.ucl.ac.uk/clinical-psychology/competency-maps/camhs-map.html>

37.1.4 Competence framework for supervision of psychological therapies

<https://www.ucl.ac.uk/pals/research/clinical-educational-and-health-psychology/research-groups/core/competence-frameworks-8>

Overview of the competence framework for supervision – background documentation for clinicians and commissioners:

https://www.ucl.ac.uk/pals/sites/pals/files/background_document_supervision_competences_july_2015.pdf

Map of supervision competences: <https://www.ucl.ac.uk/pals/sites/pals/files/supervision-map.pdf>

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