Volume 1

Exploration of Imagery in people with Agoraphobia

SAMANTHA DAY

D.Clin.Psy 2002
University College London
## CONTENTS

### Chapter 1: INTRODUCTION

<table>
<thead>
<tr>
<th>Imagery</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions of Imagery</td>
<td>2</td>
</tr>
<tr>
<td>The nature of Imagery</td>
<td>4</td>
</tr>
<tr>
<td>Imagery and its relationship with emotion</td>
<td>8</td>
</tr>
<tr>
<td>Imagery compared to verbal thought</td>
<td>10</td>
</tr>
<tr>
<td>Imagery in psychological disorders</td>
<td>14</td>
</tr>
<tr>
<td>Imagery and its use in treatment</td>
<td>23</td>
</tr>
<tr>
<td>Summary of imagery section</td>
<td>33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agoraphobia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of agoraphobia</td>
<td>36</td>
</tr>
<tr>
<td>Vicious cycle of panic</td>
<td>42</td>
</tr>
<tr>
<td>Threat appraisal model</td>
<td>45</td>
</tr>
<tr>
<td>Why explore imagery in agoraphobia?</td>
<td>49</td>
</tr>
<tr>
<td>Summary of the sections on imagery and agoraphobia</td>
<td>51</td>
</tr>
<tr>
<td>Aims of present study</td>
<td>52</td>
</tr>
<tr>
<td>Differences between this study and other research</td>
<td>53</td>
</tr>
<tr>
<td>Research questions</td>
<td>55</td>
</tr>
</tbody>
</table>

### Chapter 2: METHOD

<table>
<thead>
<tr>
<th>Overview</th>
<th>59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>59</td>
</tr>
<tr>
<td>Ethics</td>
<td>64</td>
</tr>
<tr>
<td>Procedure</td>
<td>64</td>
</tr>
<tr>
<td>Measures</td>
<td>68</td>
</tr>
<tr>
<td>Interview</td>
<td>74</td>
</tr>
<tr>
<td>Interviewer</td>
<td>78</td>
</tr>
<tr>
<td>Method of Analysis</td>
<td>79</td>
</tr>
</tbody>
</table>

### Chapter 3: RESULTS

| Distinguishing and describing the groups                              | 82   |
| Description of agoraphobic images                                    | 84   |
| Description of associated memories to the agoraphobic images          | 89   |
| Themes in imagery and linked memories                                | 93   |
| Relationship between image and onset of agoraphobia                  | 111  |
| Follow up data                                                       | 112  |

### Chapter 4: DISCUSSION

| Summary of main findings                                             | 115  |
| Findings related to the literature                                   | 122  |
| Limitations of the research                                          | 138  |
| Implications of the research                                         | 141  |
| Ideas for further study                                              | 146  |

REFERENCES 150
## APPENDICES

### Ethics
1. Approval letters 176
2. Information sheet 181
3. Letter to participant 184
4. Consent form 186

### Measures
5. Questionnaires 189
6. Interview 197
7. Content analysis coding frame 215

### Data
8. Summary of transcripts of qualitative data 220
9. Drawings of imagery from participants 245
### TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Summary of the use of imagery</td>
<td>22</td>
</tr>
<tr>
<td>Table 2</td>
<td>Summary of therapies using imagery</td>
<td>33</td>
</tr>
<tr>
<td>Table 3</td>
<td>Main aims summarised</td>
<td>58</td>
</tr>
<tr>
<td>Table 4</td>
<td>Demographics of the two groups</td>
<td>64</td>
</tr>
<tr>
<td>Table 5</td>
<td>Scores on questionnaires between the two groups</td>
<td>83</td>
</tr>
<tr>
<td>Table 6</td>
<td>Situations described in the imagery of the agoraphobic group</td>
<td>85</td>
</tr>
<tr>
<td>Table 7</td>
<td>Percentage of sense modalities reported in the image</td>
<td>86</td>
</tr>
<tr>
<td>Table 8</td>
<td>Perspective taken in the two imagery situations</td>
<td>87</td>
</tr>
<tr>
<td>Table 9</td>
<td>Further characteristics of the images</td>
<td>88</td>
</tr>
<tr>
<td>Table 10</td>
<td>Emotional valence of imagery</td>
<td>89</td>
</tr>
<tr>
<td>Table 11</td>
<td>Events spoken about in associated memories</td>
<td>90</td>
</tr>
<tr>
<td>Table 12</td>
<td>Percentage of sense modalities reported in the memory</td>
<td>91</td>
</tr>
<tr>
<td>Table 13</td>
<td>Perspective taken in the associated memory</td>
<td>92</td>
</tr>
<tr>
<td>Table 14</td>
<td>Further characteristics of the memory</td>
<td>92</td>
</tr>
<tr>
<td>Table 15</td>
<td>Emotional valence of memories</td>
<td>93</td>
</tr>
<tr>
<td>Table 16</td>
<td>Physical catastrophes cited by agoraphobic group</td>
<td>97</td>
</tr>
<tr>
<td>Table 17</td>
<td>Inter rater reliability of the themes</td>
<td>105</td>
</tr>
<tr>
<td>Table 18</td>
<td>Frequency count of the themes in the data</td>
<td>107</td>
</tr>
<tr>
<td>Table 19</td>
<td>Similarity between fear imagery and associated memory</td>
<td>109</td>
</tr>
<tr>
<td>Table 20</td>
<td>Similarity between themes in the image and memory</td>
<td>110</td>
</tr>
<tr>
<td>Table 21</td>
<td>Difference in scores on questionnaires</td>
<td>113</td>
</tr>
</tbody>
</table>
FIGURES

Figure 1: Diagnostic criteria for agoraphobia in DSM-IV 38
Figure 2: Diagnostic criteria for agoraphobia in ICD-10 40
Figure 3: A cognitive model of panic attacks 43
Figure 4: Relationship between threat appraisals and maintaining factors 47
Figure 5: Overview of procedure 67
Figure 6: Summary of questionnaire measures used in the study 73
Figure 7: Themes in the transcripts 94
Figure 8: Significant themes emerging from the imagery 119
Figure 9: Significant themes that emerged from the associated memories 120
ABSTRACT

Aim: Past research has shown that imagery can be important in the development (Wells & Hackmann, 1993) and maintenance of anxiety disorders (Hackmann, Surawy & Clark, 1998). Images have also shown to be useful in uncovering core beliefs and memories that occurred around the onset of the disorder (Wells & Hackmann, 1993; Hackmann, Clark & McManus, 2000). Although previous studies have studied imagery in obsessive-compulsive disorder (de Silva, 1986), social anxiety (Wells, Clark & Ahmad, 1998), health anxiety (Wells & Hackmann, 1993) and depression (Beck & Ward, 1961), there has been no published study exploring the imagery specific to those with agoraphobia. This thesis aims to be the first rigorous investigation exploring the imagery in people with agoraphobia, and the content of memories associated with these images. This seems a promising direction given the usefulness of imagery in other anxiety disorders for understanding development, maintenance and onset.

Method: Twenty people with agoraphobia and a matched control group were interviewed using a modified imagery questionnaire. The interview enabled the participants to talk about their recurrent images in agoraphobic situations and memories that are associated with these images. Questionnaires measuring anxiety, depression, and agoraphobic symptomology were administered before the interview, and one week after the interview.

Results: All the participants with agoraphobia were able to recall and describe recurrent images that occur in agoraphobic situations. All the participants were
also able to recall and describe memories associated with these images. Characteristics of the images and the associated memories were analysed using quantitative statistics. The themes in the images and the associated memories were analysed using a content analysis approach (Smith, 2000).

**Conclusions:** People with agoraphobia have recurrent images in agoraphobic situations that are linked to past negative memories. The themes that emerged in the imagery and the associated memories are significantly different to those found in the matched control group. The findings of this study contribute to a fuller understanding of the agoraphobic experience, and the relevance of exploring imagery in those with agoraphobia, and other psychological disorders. Clinical and theoretical implications of the findings in the study are discussed.
Acknowledgements

I would like to thank Emily Holmes especially for giving me the idea for this project, and for all her help, support and discussion about the topic throughout the thesis. I have also felt supported by Chris Barker, Peter Scragg, and Ann Hackmann, so thank you so much for your time and useful suggestions. I would also like to thank the clinicians that helped in participant recruitment, especially John Cape and Peter Butcher.

The journey of this thesis has been at times arduous, and I thank my friends and family for putting up with me, and it.

Finally, I would like to thank all the participants that took part in this project. Many of the participants were very nervous about taking part, and I am grateful that people were able to be open and honest when talking to me about their fears and traumatic experiences.
CHAPTER 1:
INTRODUCTION

This thesis explores the mental imagery that is associated in clients with agoraphobia. The introduction will be split into two main sections exploring the relevant literature: an imagery section, and a section on agoraphobia. In the first section, definitions of imagery will be discussed, and research will be presented to show current thinking about imagery. It is anticipated this research will give a context as to why exploring imagery is important in clinical practice. A model will also be discussed that attempts to explain the relationship between imagery and emotion. Further studies will be discussed to present how therapeutic work has used imagery, and outcomes will be presented from research that has looked at the themes of imagery within psychological disorders. This foundation will provide reasons as to why it is important to extend this work into exploring imagery in agoraphobia. In the second section, a definition and current models of agoraphobia will be discussed. This will illustrate how exploring imagery may provide relevant information in understanding and treating the disorder. These two sections will be linked in a further section that will explain what this study sets out to achieve, how this study is different to previous studies, and predictions that can be hypothesised from the current research exploring anxiety disorders and imagery.
Introduction

Imagery

Definitions of imagery

Horowitz (1970) defined imagery as mental contents that possess sensory qualities. In a more elaborate definition, Richardson (1969) defines mental imagery as:

All those quasi-sensory or quasi-perceptual experiences of which we are self-consciously aware, and which exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts, and which may be expected to have consequences from their sensory or perceptual counterparts.

This could include dreams and waking images of various kinds. There is a distinction between imagery and mental activity that is purely verbal and abstract. Images can include qualities from any of the sensory modalities, such as vision, touch, hearing, taste and smell, although visual imagery is the most common (Hackmann, 1998).

Images are private events, and therefore can only be viewed by the one experiencing the image. An image can come in many forms, and can vary between being concrete or abstract, complex or simple, fleeting or symbolic (Lusebrink, 1990). An individual can either be present in their image, or absent. As Pylyshyn (1973) suggested:
The whole vocabulary of imagery uses a language appropriate to describing pictures and the process of perceiving pictures. We speak of clarity and vividness of images, of scanning images, of seeing patterns in images, and of naming objects or properties depicted in images.

There is a continuum in imagery going from a near veridical reconstruction of a real event at one end of a scale to a totally imaginative construction at the other (Martin & Williams, 1990). The distinction between memories and images is difficult to define, as many imaginative images contain input from memory (Hackmann, 1998), and memories are themselves imaginative reconstructions (Barlett, 1932). The relationship between memories and imaginative images is often described as a "grey area" (Hackmann, 1998) as it is sometimes difficult to tell whether a memory image has been evoked, or an imaginative image.

Hackmann (1998) argues that caution is needed as some memories may be false, that is imaginative images that are as vivid and convincing as "real" memories. Freud began working with early memories, but decided that some of these memories were fantasies or imaginative images. Images are different to hallucinations as the person is aware that the image is in their mind rather than a perception of reality.

It is argued that imagery can provide a way of accessing much information about the individual, such as physical, emotional, mental and spiritual needs. As an internal experience, it provides access to various levels and aspects of an individuals functioning (Lusebrink, 1990). The connection between imagery
and emotion has been emphasised, and is a debate that is central to this thesis looking at imagery within a specific anxiety disorder.

In the next section, the general debate about the nature of imagery within cognitive psychology will be summarised to give a context to the theories of imagery and their relation to emotion. A specific theory linking imagery and emotion will also be presented to illustrate the significance of imagery in psychological disorders and clinical work.

The nature of imagery

There are two main arguments about the nature of imagery within the area of cognitive psychology that have been summarised by Williams, Watts, MacLeod and Mathews (1997). These authors split the two ways of thinking about imagery into the 'pictorialist', and the 'descriptionalist' positions.

The pictorialist position (Kosslyn, 1980; Paivio, 1986) argues that there is a vast similarity between the components of the external stimulus and the image. That is, the experience of the image is analogous to the perception of the external stimulus, hence the name of the position. The view that the representation of an image is very similar to the external stimulus has been partially supported by experimental data. An example of this support is an experiment that asked participants to memorise a fictional map (Kosslyn, Ball & Raiser, 1978). The map had various landmarks on it that the participants had to remember the position of. The experimenters timed how long it took participants to move between one landmark on their imagined maps to another. The experiment
showed that the time it took for participants to scan in their minds from one location to another corresponded with the time it would take on the original map. Therefore, Kosslyn, Ball and Raiser (1978) argued that there was a notable similarity between the perception of an object and its representation in imagery.

Further evidence for the ‘pictorialist’ position comes from a series of experiments by Shepard, Cooper and Metzler (Cooper & Shepard, 1973; Shepard & Metzler, 1971) using mental rotation. Participants were required to rotate an object that was presented after an original object in their ‘minds eye’ to see whether the objects were similar but shown in different perspectives. It was found that the amount of time participants took to make their judgement depended on how much mental rotation was needed. Therefore, again, it was argued that the imagined ‘movement’ was similar to actual movement. These series of experiments suggest that in mental scanning and mental rotation, the “distances” remain the same in the mental activity as the external stimulus, so there appears to be a close relationship between perception and imagery.

However, other experiments have shown that there are differences between perception and its representation in imagery. An example of an experiment that goes against a hardline ‘pictorialist’ position uses ambiguous visual illusions. Using the Necker cube (a cube that can be perceived in two ways) and the duck/rabbit (an ambiguous picture that can be seen as both a duck and a rabbit), Chambers and Reisberg (1985) asked participants to form a mental image of the picture. Using their mental images, none of the participants were able to reinterpret their images so they saw the second way of perceiving the
ambiguous image. However, when the participants were asked to draw their images on paper, all were able to see the two interpretations. It was argued that this result showed that images are organised in a particular way so there is no ambiguity. It is suggested that discoveries in images can only be made as long as the original reference frame (the organisation of the form) does not change. Therefore, how the form is originally understood has a great effect on what one can discover from the image (Reisberg, 2001). This work is important as it shows that differences between imagery and perception do occur, and that a meaning of an external experience given at the time of perception may remain the same unless the image is updated.

Arguments against the idea of images being stored as picture-like, non-reducible units in the brain include how much storage space this would take up and also how the memory could accommodate the use of so many cells for this information (Lang, 1977). Lang (1977) also argues that with remembered situations, the gaps that are not remembered are not apparent (like missing pieces in a jigsaw puzzle), which would occur if an image was stored exactly like the external stimulus. A further criticism of the pictorialist position is that it has been suggested that images often have attributional properties that are closely wedded to the image. That is, an image is not just made up of spatial relationships but facts, opinions and expectations about the situation made at the same time (Lang, 1977).

In direct contrast to the ‘pictorialist’ position is the ‘descriptionalist’ position. This position, summed up by Pylyshyn (1973), argues that the representation...
corresponding to the image is more like a description than a picture. He argues that, “seeing the image has been replaced by a set of common and completely mechanical processes”. Williams, Watts, MacLeod and Mathews (1997) suggest that the background for this way of thinking about imagery comes from computational models that suggest thoughts and images may have no place in human thinking.

Williams, Watts, MacLeod and Mathews (1997) suggest that the main crux of the disagreement between the two positions is whether imagery plays a causal role in information processing (pictorialist) or whether it has no useful role (descriptionalist). Williams et al. (1997) also note that in the debate about imagery little attention has been given to the outcomes seen in clinical work. However, the main points that are gained from this debate that are useful for this thesis are that there is a close relationship between perception and imagery, that a meaning of an image may be fixed at the time of perception and that images may contain facts, opinions and expectations that were present around the time of perception. This work is very useful when thinking about images in anxiety disorders being related to past memories (a point that will be discussed in more detail later in the introduction). Lang (1977; 1979) has explored the link between imagery and emotion by taking a descriptionist position, with a clinical focus.
Imagery and its relationship with emotion

Lang’s (1977; 1979) theory of imagery will be presented as it attempts to explain the relationship between imagery and emotion. This is relevant to this thesis, as it will help explain the role imagery may play in an anxiety disorder like agoraphobia. Lang (1977) argues, from a descriptionist position, that the brain stores knowledge about images, not pictorial representations of them. He suggests that emotional images are propositional constructions. That is, units are abstracted and interpreted during perception and stored in the long-term memory in an abstract form. These propositions are acted upon to produce an experience of an image (Kosslyn, 1975). Lang (1977) argues that when an emotional image is evoked, further information can be added or subtracted to its cognitive structure such as further semantic data, or a modification of the response.

In Lang’s model, it is argued that in an emotional image, such as a fear image of a situation that a person finds distressing, there are a finite number of propositional units. He proposed in 1977 that two classes of statements could represent these propositional units: stimulus propositions and response propositions. Stimulus propositions are descriptions about the stimuli such as the physical details, the movement made by the object, or the physical place (e.g. an auditorium of staring faces). Response propositions contain assertions about behaviour, such as verbal responses (e.g. overt and covert), overt motor acts (e.g. muscle tension, uncontrolled gross motor behaviour), and responses of the physiological organs (e.g. heart rate, salivary response). In 1979, Lang also proposed that imagery contained semantic propositions (e.g. snakes are
dangerous). Lang argues that for the fear to diminish, the whole fear imagery (stimulus, response and semantic propositions) needs to be evoked. He suggests that therapies such as desensitisation, flooding, slide and film exposure and imaginal techniques that rely on imaginal exposure to the feared stimulus, depend on the vividness or “completeness” of the evoked propositional structure.

Therefore, in summary, Lang’s theory (1977; 1979) proposes that there is a prototype fear image contained in the long-term memory. This template is used to assess external events. If the perceived stimulus does not match the prototype, then the fear response is not evoked. However if the external stimulus does match the template (in description or interpretation) then the fear response is activated. In this way, fears are maintained through conditioning. Experimental data has shown that training people to activate their response propositions in their fear imagery increases the amount of emotion and improves the success of exposure therapies (Lang, 1977; 1979).

Through the idea of templates of fear imagery existing in the long-term memory that evaluate incoming information, Lang’s model attempts to explain the relationship between imagery and emotion, and why imagery can evoke emotions like fear. This model is relevant for a study looking at imagery in agoraphobia as it attempts to explain how imagery could maintain a fear response according to the exposure principle. Also it may explain how evoking an image “in completeness” may help treat an anxiety disorder.
Therefore, through work within cognitive psychology, it has been shown that images could exist in the long-term memory with a meaning or an interpretation that was given at the time of perception. Furthermore, if the image represents a fearful situation then this ‘template’ is used to evaluate incoming stimulus, and thereby alert the individual if a fear response is activated. This work is useful for the present thesis as it gives the idea that an event, perceived as traumatic (or intensely distressing), could be stored as an image making up a template that activates fear whenever a similar situation is experienced. Therefore, the imagery could be maintaining the fear. The next section will explore the value of information that can be gained through imagery by discussing how images have been used in clinical work.

**Imagery compared to verbal thought**

Cognitive-behavioural therapy has largely focused on the use of language to gain information, rather than imagery, although many researchers (e.g. Hackmann, 1998; Sheikh & Jordan, 1983) have suggested that only using a linguistic mode could be limiting. Two main arguments that support the view of the importance of imagery will be presented in this section, firstly that imagery can give information that may not be gained through other means and secondly, that imagery can give greater access to emotion.

It has been suggested that images contain levels of meaning that are unique to the person that may not be accessible through verbal thought alone (Hackmann, 1998). Hackmann (1998) argues that images “can reflect perspectives on the past, the present, or the future, and can be literal or symbolic” which makes
them very useful in the therapeutic session. Indeed, psychoanalytic therapy puts
an emphasis on “free imagery” (like free association) as it is thought to be
effective in uncovering repressed material and undermining defences (Klinger,
1980). Similarly, Jellinek (1949) describes images as the “direct voice of the
unconscious”. Bowers and Bowers (1972) suggest that exploring images in the
clinical session gives more information as using language forces us, “to exclude
from consideration and even from consciousness those aspects of our
subjectivity that evade easy articulation”. Another unique aspect of imagery, it
has been argued, is that it could give access to important preverbal memories or
memories where, due to the developmental stage, language was not
predominant (Kepecs, 1954). Thereby, providing information that may not be
accessible through purely verbal routes. Work into PTSD (Ehlers & Clark,
2000) has also shown that some sensory material may only be encoded visually,
especially in times of high stress.

The idea of images containing information that may not be accessible through
verbal routes has been highlighted in the treatment of post-traumatic stress
(PTSD). Research into the nature of PTSD (Ehlers, 1997; Ehlers & Clark,
2000) has shown that traumatic memories may be represented in a fragmented,
sensory form, rather than in a semantic form. These memories cause distress to
the individual when they emerge as nightmares, intrusive memories, and
episodes of reliving. Treatment of traumatic memories results in the memories
being stored in a more orderly and narrative form (Foa, Molnar & Cashman,
1995). This treatment effect has been examined from a dual processing model of
memory (Brewin, Dalgleish & Joseph, 1996) that argues there are two types of
memory: verbally accessible memories (VAMS), and situationally accessible memories (SAMS). Verbally accessible memories are available to introspection, and fear responses activated by these memories appear rational and can be explained by the individual. Memories that are not accessible to consciousness (situationally accessible memories) can appear in a fragmented, sensory form, triggered by aspects of the environment that are similar to the original trauma. These memories need to be brought into consciousness, through exposure to the memory, so that they can begin to be processed. Once the memories have been successfully processed in the VAM store, the images do not cause distress. Hackmann (1998) argues this work into the treatment of PTSD could be extended into other psychological disorders where bringing traumatic fragmented images into the therapy session could help the integration and encoding of this material into the verbal memory. Therefore, contents within an image could contain information that has not been emotionally processed.

The other main reason for exploring imagery within clinical work is the association imagery has with emotion. Research has suggested that imagery contains more emotional input than verbal thought and is more likely to trigger a wide range of associations than purely verbal thought alone (Buzan & Buzan, 1997). These authors suggest that images trigger more emotional associations as they are more precise and evocative than words. It has also been proposed that material linked to painful experiences can be retrieved more easily using imagery than by language (Williams, Watts, MacLeod and Mathews, 1997). Therefore, a description through imagery could give a more accurate and
complete representation of the experience than a verbal account (Sheikh & Panagiotou, 1975). As discussed in the previous section, images that are thought to contain response, stimulus and semantic elements mean more of the fear network may be activated when an image is evoked (Lang, 1977). A number of researchers have suggested that experiencing a situation through imagery is similar to experiencing the situation in real life (Kosslyn, 1980; Neisser, 1976; Sheikh & Shaffer, 1979). Hence imaginal exposure for a client could play a significant role in bringing more understanding and emotional change than working with verbal thought alone.

There is little experimental research comparing the emotional response of imagery compared to language. Williams, Watts, MacLeod and Mathews (1997) cite two experiments that have conflicting outcomes. The first presented subjects with words in which they had to evoke a word associated with the word, or an image. There was greater skin conductance during the imagery response, compared to the verbal response (Reyher & Smeltzer, 1968). However in contrast, Baker and Jessup (1980) found that physiological responses were higher for verbalisations than visualisations. Williams et al. (1997) suggest that the conflicting results could be due to individual differences.

Despite the conflicting experimental data, the useful role that imagery could play within a clinical setting has been highlighted. Imagery has access to unprocessed material and possibly material that was perceived before language was used. It has also been argued that imagery has more emotional associations than semantic language. These arguments coupled with imagery’s association
with memory, and Lang’s theory of imagery contributing to the maintenance of fear, show that it is not surprising that images have been studied in relation to finding out further information within psychological disorders. As Sheikh and Jordan argued in 1983, “mental images, the “ostracized” ghosts (Holt, 1964) from “psychology’s dead past” (Watson, 1913) have made a robust return in experimental and clinical psychology”. In the next section, types, contents and themes of images that have been explored in clinical settings will be discussed. This section will focus on work into anxiety disorders, as this research would be most useful when exploring the imagery in agoraphobia. Exploring the actual content of the images in particular disorders seems relevant as it may provide some information as to why the disorders start, and how they are maintained. Therefore, the following section describes work that has taken this direction.

**Imagery in Psychological Disorders**

In this section, findings from a number of studies exploring imagery in a range of disorders, such as depression, obsessive-compulsive disorder, generalized anxiety disorder, panic disorder and health anxiety will be discussed to set a context as to why it is important to study the images in people with agoraphobia. Table 1 (page 22) gives a summary of the research studies that have explored imagery in psychological disorders. Table 1 summarises the following section, and presents whether mental images have been found in particular disorders, the predominant themes in the imagery, sense modalities used, the perceived function of the image, the viewpoint taken in the image and whether an association with past memories has been explored.
In their paper written in 1974, Beck, Laude and Bohnert explored the ideational components of anxiety. Although the paper mainly focused on the verbal cognitions of anxious clients, the researchers asked four of the clients about the presence of visual imagery (fantasies) associated with their anxiety. The authors comment that exploring the visual components of the anxiety was essential for treatment. It is also emphasised that exploring the images or “spontaneous fantasy” gives “precise” content to the problem. The paper discusses how the themes focused around physical and psychosocial danger. In this paper a study by Gelder, Bancroft, Gath, Johnston, Mathews and Shaw (1973) is cited, where clients who described and discussed their spontaneous images improved as much as those treated using systematic desensitisation and flooding. In 1961, Beck and Ward studied the dreams of people experiencing depression. The themes within the ideational content of these clients reflected defeat, defectiveness, thwarting and deprivation. It was with these findings that Beck began working within the foundations of a cognitive therapy framework rather than a psychoanalytical one. Beck (1970) suggested the “meanings, significances and imagery” that a person has about a stimulus or a response are essential for understanding and treating the disorder.

De Silva (1986) presented an account of the imagery in those with Obsessive-Compulsive Disorder (OCD) based on clinical records. He suggested that the content of the images was similar to verbal obsessional cognitions, and the common themes included decay and death, illness and injury, violence and disaster, and sex and blasphemy. He hypothesized that the dramatic increase of imagery intrusions when people with OCD experience stress could suggest that
the imagery mode may be more easily activated during stress than in times that are not stressful. Within this disorder, he distinguished four types of imagery: the compulsive image (formed deliberately to neutralize the obsessional image), the obsessional image (unwanted and intrusive), the disaster image (what may happen if the obsessions are not acted upon) and the disruptive image (which can interrupt compulsive rituals). He noted that all four of these images appeared spontaneously (i.e. were stereotyped and repetitive), visually, in fine detail and recurred in the same form in consistent detail. In obsessions the images were usually static, and in compulsions they usually had movement. As Hackmann (1998) points out, it can be seen that some images are seen as threatening, whereas others can protect from harm. Therefore, it is argued that images are contributing to the disorder being maintained as images show the disaster that might occur if the compulsions are not completed.

Ottaviani and Beck (1987) studied the imagery in those with panic disorder by asking about the images that occurred during a panic attack. The study found that all thirty of the participants described images, and that the themes were closely related to their verbal cognitions. The participants visualised physical catastrophes (like having a heart attack and choking) and mental catastrophes (like losing control). Themes of humiliation, failure and helplessness as a consequence of the catastrophe were also described. The researchers argue that stressful social situations or perceived negative evaluation by others led to physical sensations, which led to the cognitions and imagery. However, later work has suggested that the cognitions could occur before the physical
sensations (Clark, 1988), which means imagery could be a trigger to the panic attack.

In generalised anxiety disorder, studies have suggested that worrying, a verbal activity, may be a mechanism to avoid images that may accompany these thoughts (Borkovec & Inz, 1990). This theory therefore suggests that worrying is less distressing than emotional imagery. However, it has been suggested that by engaging in the process of worrying, the emotional processing of the images is blocked, and therefore more intrusions of the images may occur (Borkovec & Inz, 1990). This research therefore suggests that not engaging with imagery could be contributing to the maintenance of generalized anxiety disorder. In a study exploring the cognitions and imagery in twenty five people with generalized anxiety disorder and panic disorder, Hibbert (1984) found that eight patients described mental imagery when anxious. Therefore, it is not known whether these eight participants who used imagery had a primary diagnosis of panic disorder or whether, contrary to the work by Borkovec and Inz (1990), the images were present in those with generalized anxiety disorder.

Wells and Hackmann (1993) explored the imagery and core beliefs (long standing beliefs concerning vulnerability) of clients experiencing health anxiety. Their aim was to explore the content of the spontaneous images that occurred during cognitive therapy. The study was based on the hypothesis that themes in the imagery may emerge that might contribute to a tendency to misinterpret bodily symptoms and to overestimate the likelihood of illness. It was found that the hypothesis was confirmed, but also, interestingly, themes about the
interpersonal consequences of death and illness emerged. Among these beliefs were many superstitious thoughts about how having particular thoughts may affect the future (e.g. if the client thought they would get cancer, it would happen). This meant, like the images found in Obsessive-Compulsive Disorder, a neutralizing image had to be constructed, or the negative image suppressed in some way. It was suggested that this might lead to an increase in intrusions due to the act of suppression (Hackmann, 1998). Wells and Hackmann (1993) concluded that exploring images is a “quick and effective” way of uncovering beliefs and also memories that occurred around the origins of these beliefs. It was also reported that images included several sensory modalities including visual, auditory, proprioceptive and tactile, which may explain why they yield more information about the fear network than verbal content alone. This study is important in presenting how the interpersonal meaning of the image gives an insight into why particular situations are so feared and how imagery can be used to explore beliefs that are central to the individual. It was also the first study looking at the association between images and memories that occurred around the onset of the disorder.

In people with simple phobias it has been found that images are evoked on presentation of the phobic stimulus. The image that the person has transforms the stimulus to a more threatening situation where again there are interpersonal consequences (Martin & Williams, 1990). Beck (1985) described a woman with a water phobia who had images of her drowning. It can be seen that imagery can contribute to the maintenance of the phobia by making a situation appear more
threatening, and therefore lead to the subsequent avoidance of that situation, so more realistic appraisals of the danger involved are not gained.

Within social anxiety, the study of imagery has provided important information that has led to special treatment development that has significantly advanced our understanding of the disorder. It was found that people with social anxiety experienced more images when in social situations than those without the disorder. These images were significantly more negative and the people with social phobia were more likely to view themselves in this image from an external viewpoint, that is see themselves from an observer perspective (Hackmann, Surawy & Clark, 1998; Wells, Clark & Ahmad, 1998). These images are recurrent, and show the socially anxious person being humiliated or embarrassed with some awareness of an audience. The finding has been the theory behind subsequent treatment rationales where, amongst other techniques, people with social phobia are videoed to show the discrepancy between the image in their mind and reality.

In a follow-up paper focusing on the imagery of people with social phobia, Hackmann, Clark and McManus (2000) found the recurrent images were associated with memories of social situations that happened around the onset of the disorder, such as being criticized or bullied. In the study of people with social anxiety, it was suggested that unpleasant experiences might lead to negative and distorted images of the self in social situations that help maintain the anxiety. Therefore, it is suggested that images may maintain the disorder, but also arise around the onset of the disorder. In this study the memories were
scored by a neutral coder for emotional valence on a scale between minus three (for negative memories) and plus three (for positive memories). However, unlike the memories, this scoring was not used to code the emotional valence of the image. The current thesis exploring imagery in people with agoraphobia derives the methodology from this study. However, criticisms of this paper include that the research was done in the context of therapy, so the interviewer was the therapist, which may mean the therapist is not neutral. Also the study was conducted after the client had been treated for social anxiety, so the client has to remember the images from before the treatment started. With reference to the link between recurrent imagery and an onset memory, it could be argued that the client may associate a memory linked to the image due to the particular affective state the client is in after describing the image. Therefore, the association could be the affective state rather than a memory with a similar meaning. A time lapse and a visuospatial task could be used between the reporting of the image and associated memories, in order to prevent the emotion in the image contaminating the retrieval of the subsequent memory. MacLeod, Williams and Bekerian (1991) used anagrams as a cognitive distracter task in their study exploring worry, in order to prevent the emotion in one task effect the emotion in subsequent tasks.

Childhood memories in the form of intrusive imagery (memories that occur spontaneously and are uncontrollable) have also been reported within people who are experiencing depression (Kuyken & Brewin, 1994). It was found that the levels of depression were positively correlated levels of imagery intrusion. Higher levels of imagery intrusion were also associated with higher levels of
childhood abuse, again reinforcing this link between higher levels of imagery and increased stress. This finding could be explained as Beck (1967) suggested, that environmental stress activates cognitive schemas and representations in past memory. Due to the schema activation, patterns of negative thinking can follow. Furthermore, Brewin (1989) argued that clients gain access to past memories of distress that share a contextual similarity with the current adversity. This suggests that distressing images in depression could be related to past traumatic memories. This point again links imagery and past traumatic memories, which has been illustrated within work discussed earlier in this introduction.

To summarise, the research in this section, although limited in volume, illustrates that exploring the content of images in those with psychological disorders has provided interesting information into the nature of the disorders. It can be seen that there are common themes within the psychological disorders studied, and following work by Hackmann, Clark and McManus (2000), images can provide a way of assessing central beliefs the individual might have about themselves, others and the world. Furthermore, research has also shown that the content of images may have a foundation in traumatic memories that occur early on in life, around the onset of the disorder. This research also highlights the role imagery can play in maintaining the disorders.
<table>
<thead>
<tr>
<th>Disorder</th>
<th>Presence of Imagery</th>
<th>Themes</th>
<th>Sense modalities</th>
<th>Function of image</th>
<th>Perspective/Viewpoint</th>
<th>Imagery relationship with memory of onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCD</td>
<td>Yes</td>
<td>Stereotyped and repetitive. Visual in fine detail.</td>
<td>Visual</td>
<td>Threatening and some protect from harm. Contribute to maintenance of disorder.</td>
<td>Not researched</td>
<td>Not researched</td>
</tr>
<tr>
<td>GAD</td>
<td>Worrying to block imagery (Borkovec &amp; Inz, 1990)</td>
<td>Interpersonal consequences of death and illness</td>
<td>Visual</td>
<td>Suppression of images, leading to more intrusions. Contribute to maintenance of disorder.</td>
<td>Not researched</td>
<td>Not researched</td>
</tr>
<tr>
<td>Health anxiety</td>
<td>Yes (Wells &amp; Hackmann, 1993)</td>
<td>Interpersonal consequences of death and illness</td>
<td>All senses</td>
<td>Threatening and neutralizing images. Also suppression of images, leading to more intrusions. Contribute to maintenance of disorder.</td>
<td>Not researched</td>
<td>Through imagery found memories that occurred around the onset of the disorder</td>
</tr>
<tr>
<td>Simple Phobias</td>
<td>Yes (Martin &amp; Williams, 1990)</td>
<td>Interpersonal consequences of death and illness</td>
<td>Visual</td>
<td>Threatening. Contribute to maintenance of disorder.</td>
<td>Not researched</td>
<td>Not researched</td>
</tr>
<tr>
<td>Social Phobia</td>
<td>Yes (Hackmann, Clark, &amp; McManus 2000). Recurrent.</td>
<td>Being humiliated or embarrassed in front of an audience.</td>
<td>All senses</td>
<td>Threatening. Contribute to maintenance of disorder.</td>
<td>In fear image, see themselves through external viewpoint</td>
<td>Images revealed memories that occurred around onset of disorder</td>
</tr>
<tr>
<td>PTSD</td>
<td>Memories, dreams, hallucinations, of traumatic event.</td>
<td>Focus on specific parts of the traumatic memory</td>
<td>All senses</td>
<td>Unprocessed information. Threatening. Contribute to maintenance of disorder.</td>
<td>Not researched</td>
<td>Flashback and intrusions related to trauma memory</td>
</tr>
</tbody>
</table>
Imagery and its use in treatment

The role imagery plays in treatment during the clinical session will now be discussed to see whether any further information or uses of imagery can be gained that would reinforce the need to explore the possible imagery in agoraphobia. Table 2 (page 33) summarises this section, describing the use of imagery in therapy, and the aims each therapy has in relation to imagery.

The role of imagery as a useful type of cognition to explore in psychological disorders has a long history. Breuer was the first clinician to record his use of imagery with his treatment of Anna O. (Freud & Breuer, 1955). Anna O. developed paralysis of her limbs, and disturbances of vision and speech after her father’s last illness. Breuer found that her symptoms disappeared after she described her terrifying hallucinations. Breuer used hypnotism for her to recall the situation and associated connections of when the symptoms first appeared. Although her symptoms were never entirely cured, the case left a deep impression on Freud. Freud adopted a similar technique where he would press on the client’s head and ask the client to observe images that appeared as the pressure on the head was relaxed. Freud proposed that client’s started seeing images that were central to their conflicts. Using this technique, it is proposed that Freud discovered resistance (Sheikh & Jordan, 1983). Freud put a great emphasis on images, which he felt were more primitive than other types of thinking. However around the year 1900, Freud started favouring verbal thought, as he saw imagery as a resistance to free association. Imagery techniques play a significant role in the therapies of psychoanalysis and psychosynthesis. However, in this section the role of imagery will be discussed
further mainly in relation to clinical psychologists working within a cognitive
behavioural framework as the model of agoraphobia being used as a starting
point for this thesis is cognitive behavioural. Therefore, the following section
consists of a list of examples of where imagery has been used in cognitive
behavioural therapy.

Behavioural procedures based on Pavlovian or conditioning models have used
imagery as a way of symptom control and counter-conditioning. Watkins (1976)
points out “the image is not used for its own intrinsic sake, but for its pragmatic
use in symptom control. Its power is recognised but not its purpose”. Wolpe
(1958) is credited for developing the technique of systematic desensitisation,
although earlier accounts of the therapy exist (Kretschmer, 1922; Williams,
1923). Sheikh and Jordan (1983) cite Salter (1949) as the first clinician to use
imagery as the main emphasis in the procedure rather than the actual feared
stimulus. Systematic desensitisation is based on the assumption that the
sympathetic nervous system and the parasympathetic nervous system cannot
work at the same time, called “reciprocal inhibition”. Reciprocal inhibition
therefore states that an individual cannot be relaxed and anxious simultaneously.
The procedure of systematic desensitisation consists of preparing a hierarchy of
anxiety-producing stimuli. After training in progressive muscle relaxation, an
individual visualises each step of the hierarchy until relaxation replaces the
anxiety (e.g. imagining a mental image of a spider, and a following step being
approaching the spider). Images are usually used in this procedure rather than
the actual feared stimulus as it is usually more practical. It has also been shown
that imagining a fear situation produces similar physiological changes (such as
flight or fight) in the body as actual experiencing the situation (Jacobsen, 1929).

However, of course, the clinician cannot be completely sure what the client is
actually imagining. There has also been some research to suggest that how an
individual imagines their feared object may be distorted (Brown, 1969).

Although the technique produces significant results in alleviating fear and
anxiety (Sheikh & Panagiotou, 1975; Singer, 1974), controversy remains as to
what the mechanism of change is. Singer (1974) suggests that it is not the
relaxation or the hierarchy, but familiarity with the phobic situation. However, it
has also been argued that the critical factor may be the change in the images and
daydreams about the feared object (Singer & Pope, 1978). Weitzman (1967)
proposed that when the client holds the image in their minds, other images and
associations occurred, so by the end of the period the image had often changed.

It has been suggested that the therapy may change the images and the client’s
expectations about the feared stimulus (Hackmann, 1998). This relates to
Lang’s work where the fear network could be activated by evoking the image,
and new, less threatening information is added to make the fear response reduce
(Lang, 1977).

A technique that uses imagery not presented in a graded hierarchy, but
presented in a maximally intense way is “implosion”. Implosion is a technique
proposed in a paper by Stampfl and Levis (1967). It was suggested, in the paper,
that clients had often experienced traumatic situations in their early life where
they had been punished, humiliated or rejected. When sensory information
about this situation is evoked, then anxiety is felt. To avoid the anxiety,
avoidance responses are learned and reinforced as they reduce the anxiety. The
technique of the therapy was to recreate the original situation, but in the absence of the punishment, so that the anxiety would be extinguished. Imagery was used to evoke the visual situation. Levis (1980) suggested that one of most interesting findings when using implosion therapy was that when clients thought about the most feared outcomes in their feared situations, early memories during the imaginal scenes were evoked. So, therefore again, the input of early traumatic memories into imagery is highlighted.

Both flooding and systematic desensitisation are based on learning theory to help the individual with symptom control. Further imagery techniques, such as ‘repetition’ and ‘decatastrophising’ (Beck, Emery & Greenberg, 1985) also involve imaginal exposure (when the client hold the image in their mind) to help clients with anxiety. Repetition is when the client thinks about the image for a long time until the images either changes or reduces due to the exposure. Decatastrophising, which focuses on more cognitive techniques to explore the image, occurs when the client thinks about the image and questions whether the image is really that distressing. All these techniques involve an image being brought to mind until the high anxiety response is not experienced anymore. Like the techniques described before, exposure to the image is one of the main components.

“Coping imagery” (Meichenbaum, 1977) is a technique that uses exposure to the feared imagery, but the difference is that additional positive information is put in the image. It is proposed that the client visualises the scene that they find distressing, and then visualise themselves responding to the scene using deep
breathing, relaxation and self-instruction. Other techniques involve the image being changed to a pleasant outcome as opposed to the feared outcome, and also the feared outcome turning into an absurd outcome, such as for a socially anxious client, an interviewer wearing no clothes (Beck, Emery & Greenberg, 1985). Again, these techniques focus on creating new images to replace or as an addition to established imagery. Another technique that helps the client to create new images to use is relaxation training.

Relaxation training incorporates many aspects of imagery use. These techniques can include the client imagining a “special place” in as much detail as they can (Beck, Emery & Greenberg, 1985). This special place can be recalled whenever the client wants a relaxing image to physically calm down the body, or to use as a distraction technique. ‘Anchors’ are sometimes used, which is a sensory association to the desired image: for example rubbing the thumb and forefinger together may be the link that evokes the image. Imagery has also been used as an adjunct to medical treatment, where patients are encouraged to use imagery to help fight their illness. This has been done with cancer patients so that the patient visualises their body “being at war against the cancer cells”, and chemotherapy being reframed so it is imagined as the “healing light” or the “elixir of light” (Brigham, 1994). Further to this technique, Brigham (1994) works with chronically ill patients using “high level awareness”. In this part of the therapy, patients are asked to see feelings as a garden, and particular feelings like depression and guilt are seen as “weeds”. Through imagery, the patient uproots the “weed” and replaces it with another plant that will promote healing.
Rapid Eye Movement Desensitisation and Reprocessing (EMDR) (Shapiro, 1995) used in a variety of disorders such as PTSD and phobias uses techniques to modify the images to help cope with distressing thoughts and images. Clients are required to modify their images so the images become less distressing. This may happen by the client imagining that they are visualising a traumatic scene from a distance, or from behind a transparent glass. At the same time, the clients are asked to move their eyes in a directed way so that the relationship between the image and what the client verbalises is weakened. Clients also accompany the images with positive self-statements, such as “I’m in control”. Controversy surrounds EMDR as to what the useful components in this therapy are, such as whether the rapid eye movements are necessary (Hackmann, 1998). Hackmann (1998) suggests that there is a similarity between this technique and other techniques where the client is exposed to the distressing image until the affect reduces due to the content and the meaning of the image changing.

Imagery rescripting is another recent technique that focuses on image modification. It has been used primarily in the treatment of PTSD imagery (Dancu & Foa, 1993). Imagery Rescripting consists of using imagery, verbal processing and schema-modification. Using Socratic techniques the therapist attempts to uncover all aspects of the fear network such as images and trauma based beliefs. The therapist assists in helping the client replace this imagery with creative empowerment imagery that leads to a reprocessing of the information. It is the client who comes up with the idea for the new imagery. It is suggested that imagery rescripting promotes changes in affect, self-perception and self-appraisal (Rusch, Grunert, Mendelsohn & Smucker, 2000). In a paper
by Arntz and Weertman (1999), imagery rescripting is used to help clients deal with traumatic abuse memories. In their work, the authors help the clients imagine early abuse situations, and then rescript the image by the client imagining them as an adult intervening. Later in sessions, only the scenes where the adult intervenes are imagined. It is theorised that rescripting the memory is useful due to modern learning theory. It is argued that in imagery rescripting, the client remembers the original incident that may have led to their generalised rules and assumptions about the self, others, and the world (distrust schemas). By focusing on the original experience, the client is able to reappraise the original experience, and, it is argued, will lead to new schemas and the reduction of the scope of the old schematic representation. It is argued that through therapy further disconfirmation of old schematic representations are reinforced through role-play, and discovering that the situation they experienced was an exception, not a general rule. The therapy is relevant to this thesis as it emphasises how memories can contribute to generalised rules and assumptions of the world that can be activated through imagery.

Another treatment for PTSD using imagery, that has a different theoretical background, has been the repeated reliving of the trauma (Foa, Rothbaum, Riggs & Murdock, 1991). Foa, Molnar and Cashman (1995) argue that PTSD may occur when inadequate processing of the traumatic memory occurs, sometimes due to the memory being held out of awareness. Clients are asked to go over in detail their traumatic experiences, describing exactly what happened. In more recent models of PTSD (e.g. Ehlers & Clark, 2000), attention is given to the “hot spots” (Grey, Holmes & Brewin, 2001) of the memory, which are the
scenes that cause the most distress are associated with images. This account is
tape recorded, and the client listens to the tape daily if possible. This technique
is based on the model that PTSD occurs when there has been inadequate
emotional processing of the event (Foa & Kozac, 1986). It is argued that
distressing memories may be held out of awareness due to certain situations,
such as the individual dissociating at the time of trauma, so reliving i.e. bringing
images of the trauma situation to mind and accessing their associated meanings
helps the event become less fragmented. It can therefore be successfully
processed, and the intrusive, uncontrollable, distressing visual trauma imagery
reduced. Grey, Holmes and Brewin (2001) highlight that the imagery in PTSD
does not only contain fear, but also other emotions such as shame and
humiliation.

Imagery has also been used to look at the client’s unconscious, and central
beliefs they might have about the world. Brigham (1994) also cites the use of
“transformational fantasy” techniques (Shaffer, 1986). Patients are asked to
imagine a strange road and an unusual house. Using the descriptions of these
places that the patient gives, it is argued that people will talk about blocks and
barriers in their life that they may not be consciously aware of. She calls this
technique “exploring the corridors of the mind”. Working in a more cognitive
framework, Hackmann (1998) argues that exploring images can provide an
insight into the meaning of the image for the person and what the worst thing
about this image is. This can also help the therapist find out core beliefs about
the individual, such as what the image means about the self, others and the
world in general. Hackmann also suggests that gaining the sensory information
about the image and the meaning provides a way of linking the image to earlier memories that may have been the cause of maladaptive schemas early in life. It is argued that this is different to dream analysis, as the client provides their own ideas as to what the memory and meaning is.

There are a number of ways of working with imagery in cognitive therapy. Hackmann (1998) suggests that within the therapy session, the therapist could work on the meaning within the image, transforming the image, and exploring the meaning of actually having the image. She also suggests that actual memories can be explored, and also modified using imagery techniques. Hackmann (1998) proposes that images can occur in any modality and represent the past, present or future. It is suggested that when working with anxiety disorders, asking the client to picture the scene often gives precise information about the feared catastrophe. Staying with the image enough time may give access to associated memories significant to the image. Wells and Hackmann (1993) found that asking the client about their earliest recollection of having the thoughts, feelings and sensory experiences associated with the image often takes a client back to the traumatic memories that may have triggered off maladaptive schemas.

Other techniques used to transform images, cited by Hackmann (1998), include running the image past the point it usually stops at (as the image is usually frozen at the worst point), transforming the image into something else (such as a television set that could be turned off), and movements such as zooming in on an image to make it clearer or bigger.
Therefore in this section, it can be seen that images have been used in many creative ways in therapy. These have included using imagery as a way of exposing the client to a threatening situation and being able to cope, either through the clients actually being relaxed or imagining themselves relaxed. Also clients have used imagery either to create an entirely different image to distract from the threatening image, or to transform the image into one less distressing. Other techniques in cognitive therapy have used images to help elicit core beliefs and the onset of maladaptive schemas. Therefore, in relation to this thesis, clinical work using imagery has shown that it can be a very powerful treatment tool, and highlights the close relationship between imagery and behaviour. It can be seen that having certain images can change behaviour, and therefore shows how having fear images could maintain a psychological disorder.
Table 2: Summary of therapies using imagery

<table>
<thead>
<tr>
<th>Imagery technique</th>
<th>Exposure to distressing images</th>
<th>Positive imagery added to image</th>
<th>Totally new image created</th>
<th>Verbal challenging of image</th>
<th>Reactivation of early memories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systematic desensitisation (Wolpe, 1958)</td>
<td>Gradually leading up to feared situation</td>
<td>Not intentionally</td>
<td>No</td>
<td>Not intentionally</td>
<td>Not intentionally</td>
</tr>
<tr>
<td>Implosion Therapy (Stampfli &amp; Levis, 1967)</td>
<td>Maximal exposure to feared situation</td>
<td>Not intentionally</td>
<td>No</td>
<td>Not intentionally</td>
<td>Yes</td>
</tr>
<tr>
<td>Repetition (Beck, Emery &amp; Greenberg, 1985)</td>
<td>Yes</td>
<td>Not intentionally</td>
<td>Not intentionally</td>
<td>Not intentionally</td>
<td>Not intentionally</td>
</tr>
<tr>
<td>Decatastrophising (Beck, Emery &amp; Greenberg, 1985)</td>
<td>Yes</td>
<td>Yes</td>
<td>Not intentionally</td>
<td>Yes</td>
<td>Not intentionally</td>
</tr>
<tr>
<td>Coping imagery (Meichenbaum, 1977)</td>
<td>Yes</td>
<td>Visualising themselves relaxing, deep breathing etc</td>
<td>Possibly</td>
<td>Not intentionally</td>
<td>Not intentionally</td>
</tr>
<tr>
<td>Relaxation (e.g. Brigham, 1994)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>EMDR (Shapiro, 1989)</td>
<td>Yes</td>
<td>Yes</td>
<td>Possibly</td>
<td>Yes</td>
<td>Not intentionally</td>
</tr>
<tr>
<td>Imagery rescripting (Dancu &amp; Foa, 1993)</td>
<td>Yes</td>
<td>Yes</td>
<td>Possibly</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Reliving (Foa et al., 1991)</td>
<td>Yes</td>
<td>Not intentionally</td>
<td>Not intentionally</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Insight techniques</td>
<td>Yes</td>
<td>Not intentionally</td>
<td>Not intentionally</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cognitive Therapy (e.g. Hackmann, 1998)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Summary of Imagery section

In the above section exploring the use of imagery within cognitive psychology, and work within the clinical session, some summary points about imagery can be made. Images can use all the sense modalities and are representations of perceptual, sensory or other experiential states (Hackmann, 1998). There are many similarities between imagery and perception, however there are also differences (Reisberg, 2001). Although verbal thought is most frequently used
in cognitive behavioural therapy, it has been shown that this could be limiting. Imagery has many levels of meaning about an experience for an individual and, it is argued, has access to wider associations than verbal thought alone (Hackmann, 1998). Imagery has been used in the treatment of anxiety disorders, for example in symptom control, for creating new images, for modifying old images and as an indication of whether an experience is sufficiently processed. Imagery has also been used to explore central beliefs the individual has about themselves, others and the world, and also explore past memories that may have contributed to the onset to the disorder. Within anxiety disorders, the themes in images compared to verbal cognitions can be very similar, however may be more “precise” in meaning (Beck, Laude & Bohert, 1974) and give additional information. Hackmann (1998) argues that studying images avoids the vagueness and cognitive avoidance that can occur with verbal discussion. As can be seen from the research presented, it seems that images can have various roles, to show threat, or to protect against threat. The first role seems to be warning an individual about the potential risks about being in a particular situation. The image can give information about the interpersonal cost of an outcome, and the probability that it will occur. Studies have suggested that imagery and automatic thoughts may have an evolutionary role in alerting the individual about a possible reality (Beck, 1985; Beck, Emery & Greenberg, 1985; Martin, 1988). The second role, seen in OCD (de Silva, 1986) and health anxiety (Wells & Hackmann, 1993) seems to be how imagery can be used to neutralise fear images. Thereby showing how imagery can play a threatening, but also a ‘protection from threat’ role in anxiety disorders.
Imagery has shown to be an important source of information within anxiety disorders that has contributed to ideas concerning onset, maintenance and treatment of the disorders. However, there has not been a published paper about the role of imagery in agoraphobia. This seems an omission considering the work illustrated above that has progressed studies into other anxiety disorders, especially social anxiety (Hackmann, Clark & McManus, 2000), health anxiety (Wells & Hackmann, 1993) and obsessive-compulsive disorder (de Silva, 1986). This thesis seeks to explore the phenomenology of imagery in agoraphobia: looking at the relationship between themes, core beliefs and past memories. Therefore, in the next section, literature concerning definitions and models of agoraphobia will be presented, with areas being highlighted as to where information about imagery might be useful.
Agoraphobia

In this thesis, imagery will be explored in people who are experiencing agoraphobia (i.e. the clinical population). It is hoped that exploring the imagery within this disorder will be useful in finding out the main themes of the disorder, and give further insight into possible onset of the disorder and why the disorder is maintained. This section will focus on agoraphobia: a psychiatric definition of the disorder, and models that attempt to explain the nature of the disorder.

Definition of agoraphobia

Westphal coined the term agoraphobia in a paper published in 1871. The term “agoraphobia” derives from the Greek root “agora” meaning an assembly, the place of assembly, and the market place. Westphal’s definition focused on the fear some of his clients had of walking through public spaces like streets. He stated that none of his clients knew why they had developed this fear. All his clients believed that while they were in public places something awful was about to happen to them. Westphal noted that his clients had panic attacks and were “anxious about their anxiety” (Kuch & Swinson, 1992). Freud (1895/1949) extended the discussion by linking the panic attacks to the agoraphobia. He suggested that clients feared the repetition of a panic attack in the situation it had occurred before.

The current diagnostic criteria in DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, American Psychiatric Association (DSM-IV) p.396) states that agoraphobia can exist in relation to either the presence or
absence of panic disorder (see Figure 1, pg. 38). That is, agoraphobia is coded as either “panic disorder with agoraphobia” or “agoraphobia without a history of panic disorder”. However, also included within the latter diagnostic criteria is a requirement that the presence of agoraphobia is related to the fear of developing panic-like symptoms. Over 95% of people with agoraphobia seen in clinical settings also have a current or past history of panic disorder (DSM-IV). However, within the population of people with agoraphobia, this figure may be an over-estimate as it may reflect influences on help-seeking behaviour. This is illustrated by work suggesting that people with panic disorder are more likely to seek help for their problem more than other psychiatric diagnoses (Boyd, 1986).

DSM-IV defines agoraphobia as “anxiety about being in a places or situations from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having a panic attack...or panic-like symptoms (e.g., fear of having a sudden attack of dizziness or a sudden attack of diarrhoea)”. The definition states that agoraphobic fears involve characteristic clusters of situations that include: being outside the home alone; being in a crowd or standing in a queue; being on a bridge; and travelling in a bus, train or automobile. Also important to the definition is that situations are avoided or else endured under marked distress about having a panic attack or panic-like symptoms, or require the presence of a companion. A further component is that the anxiety or avoidance is not better accounted by another mental disorder, such as social phobia.
The World Health Organization's (ICD-10) (World Health Organization, 1992), the widely used classification system in Europe does have separate diagnosis for Agoraphobia, plus one for Agoraphobia with panic disorder and agoraphobia without panic disorder (see Figure 2, pg.40). For clarity, Figures 1 and 2 show the criteria for Agoraphobia, with and without a history of panic disorder, from DSM-IV and ICD-10.

**Figure 1: Diagnostic criteria in DSM-IV**

### Criteria for Agoraphobia

**Note:** Agoraphobia is not a codable disorder. Code the specific disorder in which Agoraphobia occurs (e.g., 300.21 Panic disorder With Agoraphobia or 300.22 Agoraphobia Without History of Panic Disorder)

A. Anxiety about being in places or situations from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having an unexpected or situationally predisposed Panic Attack or panic-like symptoms. Agoraphobic fears typically involve characteristic clusters of situations that include being outside the home alone; being in a crowd or standing in a line; being on a bridge; and travelling in a bus, train and automobile.

B. The situations are avoided (e.g., travel is restricted) or else are endured with marked distress or with anxiety about having a Panic attack or panic-like symptoms, or require the presence of a companion.

C. The anxiety or phobic avoidance is not better accounted for by another mental disorder, such as Social Phobia (e.g., avoidance limited to social situations because of fear of embarrassment), Specific Phobia (e.g., avoidance limited to a single situation like elevators), Obsessive-Compulsive Disorder (e.g., avoidance of dirt in someone with an obsession about contamination), Posttraumatic Stress Disorder (e.g., avoidance of stimuli associated with a severe stressor), or Separation Anxiety Disorder (e.g., avoidance of leaving home or relatives).
### Diagnostic Criteria for 300.21 Panic Disorder With Agoraphobia

A. Both (1) and (2)

(1) Recurrent unexpected Panic Attacks
(2) At least one of the attacks has been followed by 1 month (or more) of one (or more) of the following:

(a) Persistent concern about having additional attacks
(b) Worry about the implications of the attack or its consequences (e.g., losing control, having a heart attack, “going crazy”)
(c) A significant change in behaviour related to the attacks

B. The presence of Agoraphobia

C. The Panic Attacks are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism)

D. The Panic attacks are not better accounted for by another mental disorder, such as Social Phobia (e.g., occurring on exposure to feared social situations), Specific Phobia (e.g., on exposure to a specific phobic situation), Obsessive-Compulsive Disorder (e.g., on exposure to dirt in someone with an obsession about contamination), Posttraumatic Stress Disorder (e.g., in response to stimuli associated with a severe stressor), or Separation Anxiety Disorder (e.g., in response to being away from home or close relatives).

### Diagnostic Criteria for 300.22 Agoraphobia Without History of Panic Disorder

A. The presence of Agoraphobia related to a fear of developing panic-like symptoms (e.g., dizziness or diarrhea)

B. Criteria have never met for Panic disorder.

C. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

D. If an associated general medical condition is present, the fear described in Criterion A is clearly in excess of that usually associated with the condition.
Diagnostic Criteria in ICD-10
F40.0  Agoraphobia

All the following criteria should be fulfilled for a definite diagnosis:

(a) the psychological or autonomic symptoms must be primarily manifestation of anxiety and not secondary to other symptoms, such as delusions or obsessional thoughts;

(b) the anxiety must be restricted to (or occur mainly in) at least two of the following situations: crowds, public places, travelling away from home, and travelling alone; and

(c) avoidance of the phobic situation must be, or have been, a prominent feature.

The presence or absence of panic disorder in the agoraphobic situation on a majority of occasions may be recorded by means of a fifth character:

F40.00  Without panic disorder

F40.01  With Panic disorder

As can be seen, an essential part of the diagnostic criteria in DSM-IV for agoraphobia is the presence of panic attacks or panic-like symptoms. Panic disorder is defined by recurrent panic attacks, followed by at least a month of persistent concern about having more attacks, worry or concern about the implications of the attacks, and a marked change in behaviour as a result of the attacks. A panic attack is defined as a rush of fear or discomfort that reaches a peak in less than ten minutes and includes at least four of the following thirteen symptoms: racing or pounding heart; sweating; shaking or trembling; shortness of breath; choking feelings; chest discomfort; nausea or abdominal discomfort; feeling dizzy, faint or light headed; feelings of unreality or depersonalisation; fear of going crazy or losing control; fear of dying; numbness or tingling
sensations; or chills or hot flushes (DSM-IV) and can last for about twenty
minutes (Barlow & Craske, 1988).

Clarke and Jackson (1983) described the panic attacks as the “motor” that drives
the agoraphobic avoidance. In 1987, Klein argued that agoraphobia was a by­
product of panic disorder. It was suggested that the avoidance that occurred in
agoraphobia, was due to a fear of panic. Therefore, as Freud (1895; 1949)
suggested, it was a fear of places where a panic attack could occur. Thorpe and
Burns (1983) supported this theory through interviewing people with
agoraphobia showing that the most common fear was that of a panic attack.
However, other fears that emerged were collapsing and fainting. Hallam (1978)
found that fears of illness and death were prominent amongst a group of people
with agoraphobia. Rachman (1998) describes how most treatments for
agoraphobia focus on tackling the panic disorder, then “mopping up the
agoraphobic avoidance”. One third of people with panic disorder in community
samples also have agoraphobia (DSM-IV). According to the DSM-IV,
agoraphobia can develop at any point, however it is usually within the first year
of recurrent panic attacks. The lifetime prevalence of agoraphobia in those with
agoraphobia is just under 6% (Robins & Regier, 1991). Agoraphobia has an
unequal sex distribution, unlike panic disorder, where about three quarters of
those experiencing agoraphobia are female (Myers et al., 1984).

Therefore, to summarise the above literature, a person experiencing agoraphobia
fears have a fear of “places of assembly” or places where people gather. These
people fear that a panic attack could occur with escape being difficult and help
not available. Therefore, these places are avoided. In relation to the work on imagery showing how images can be used to show potential threat, one may hypothesise that someone with agoraphobia may have an image of how he or she looks in the public place, what he or she perceives the situation to be, and what may happen if they try to escape from the situation.

Specific models of the disorder will now be discussed to show current thinking about how the disorder of agoraphobia starts and how it is maintained. The first model discussed is the vicious cycle of panic (Clark, 1986) showing how the symptoms of panic are maintained.

**Vicious cycle of panic (Clark, 1986)**

In a seminal paper, Clark (1986) argued that panic attacks are caused by the misinterpretation of bodily sensations. He suggested that normal anxiety responses, such as dizziness and heart palpitations, might be interpreted as being more dangerous than they actually are. An example of a “catastrophic” misinterpretation would be palpitations as being evidence of an impending heart attack, or perceiving a shaky feeling as being evidence of losing control or insanity.

Clark (1986) argues that a wide range of stimuli could initiate a panic attack. Stimuli could be external such as a situation where a panic attack happened before, or internal, such as a body sensation, thought or image. If the stimulus were seen as threatening, apprehension would be felt, and anxiety symptoms would be experienced. If these symptoms were interpreted in a catastrophic
way, further apprehension and therefore further anxiety symptoms would be felt. In this way, a vicious cycle of panic is experienced which leads to a full-blown panic attack.

![Figure 3: A cognitive model of panic attacks (Clark, 1986)](image)

Clark (1986) argues that the model can explain panic attacks that are anticipated, and also panic attacks that "come out the blue". In the case of expected panic attacks (such as situations where a panic attacks has occurred before), anticipation of an attack may lead to selective focusing on the body, noticing an unpleasant bodily sensation, misinterpreting the symptom as an attack, and thereby activating the vicious cycle of panic. In the case of unpredicted panic attacks, Clark suggests that these too could be caused by the misinterpretation of bodily sensations as catastrophic. Examples of this could include different emotional states (such as excitement), drinking coffee (palpitations), getting up quickly (dizziness) or exercise (breathlessness). Again, once the misinterpretation of bodily sensations occurs, the cycle of panic is put into action.
Evidence for the vicious cycle of panic cited by Clark (1986) includes the success of treatment trials that focus on changing a patient’s tendency to misinterpret bodily sensations (Clark, Salkovskis & Chalkley, 1985; Griez & van den Hout, 1986), and studies that show that those who have panic attacks are more likely to have thoughts about the anticipation of illness, death or loss of control (Hibbert, 1984).

Margraf and Ehlers (1989) added a negative feedback process to the vicious cycle of panic to show how panic attacks could come to an end. The negative feedback loop consists of coping strategies to counterbalance the vicious cycle of panic that lead to a reduction in anxiety. Examples of the negative feedback loop include paced breathing, distraction, and reattribution of bodily sensations to anxiety to counterbalance the catastrophic misinterpretation of physiological symptoms.

Franklin (1987) argues that the misattribution of panic attacks to an outcome such as a heart attack or loss of control can lead to avoidance of situations, which when generalised leads to agoraphobia. He suggests that agoraphobia is the final developmental stage following generalised anxiety disorder and panic disorder. The model suggests that agoraphobia occurs due to the presence of panic attacks, and the attacks begin before the avoidance of particular situations. The model argues that people with agoraphobia fear the symptoms of anxiety, and the outcome that these symptoms represent (such as becoming trapped, being helpless, causing a scene) more than the actual situations, such as public
transport or wide streets. This model is interesting as it adds the component of the fear of outcome as separate to the fear of the physiological symptoms.

Therefore, to summarise the relationship of this model to the work looking at imagery in agoraphobia, one could hypothesise that in agoraphobic imagery a catastrophic interpretation of anxiety symptoms would be apparent, and also the fear something awful is about to happen. However, the model does not answer questions relating to why some people have panic attacks and develop agoraphobia, and some people have panic attacks and do not develop agoraphobia.

Another model that is important in understanding agoraphobia is the threat appraisal model (Clark, 1988; Salkovskis, 1988, 1991; Salkovskis, Clark & Gelder, 1996) that has developed out of the vicious cycle of panic (Clark, 1986). This model attempts to explain the cause and maintenance anxiety in agoraphobia by adding more cognitive variables, such as pre-existing beliefs and assumptions.

**Threat Appraisal Model**

The Oxford Cognitive Therapy Research Group (Clark, 1988; Salkovskis, 1988, 1991; Salkovskis, Clark & Gelder, 1996) has proposed that the cause and maintenance of the anxiety in panic disorder is threat appraisal. The model predicts that a person appraises a situation as threatening as a result of their pre-existing beliefs and assumptions about the situation they are in. Due to these pre-existing beliefs, situations are judged as being threatening and dangerous. Examples of these beliefs can be about the world in general (e.g. the world is a
threatening place, and bad things can happen), anxiety specific (e.g. If I become anxious, I will lose control), or specific to particular symptoms (e.g. My stomach is churning, I am going to have diarrhoea). The group suggest that the strength of the threat appraisal is implicitly calculated by the following equation:

\[
\text{Anxiety} = \frac{\text{Perceived likelihood of danger} \times \text{perceived "cost" or awfulness of danger}}{\text{Perceived coping ability} + \text{perceived rescue factors}}
\]

From the equation it can be seen that if a person evaluates the probability of threat and what will happen to them due to the threat as being very high, plus their coping ability and rescue factors being low, then anxiety is activated. Research has shown that panic disorder and agoraphobic clients tend to overestimate the probability and the awfulness of the threat, such as physical sensations (Salkovskis, 1991; Telch, Brouillard, Telch, Agras & Taylor, 1989), and underestimate the probability of coping (Salkovskis & Hackmann, 1997). Studies (de Ruiter & Garssen, 1989; Pollard & Cox, 1988) have also shown that people with agoraphobia have more social evaluative concerns than panic clients. Salkovskis and Hackmann (1997) give an illustration of a client with agoraphobia feeling faint, thinking this means he/she is likely to pass out, this would result in unbearable humiliation, that he/she would not be able to cope with this humiliation, will be taken to a mental hospital indefinitely, and no one will try to help or understand. Therefore, the probability of being able to cope with such an awful situation for the person with agoraphobia would inevitably
be low. Throughout the literature exploring agoraphobia, (as reviewed by Mathews, Gelder & Johnston, 1981), dependency and lack of confidence in being able to cope are themes that are prevalent. These themes may interact within the threat appraisal equation, which would result in more anxiety. Within the equation, imagery could contribute significantly to overestimating the awfulness of the threat, and underestimating coping strategies.

Although for many agoraphobics the catastrophic beliefs they believe will occur in agoraphobic situations do not occur, the negative beliefs are still maintained. According to the cognitive model, this occurs due to three variables: physiological arousal, selective attention and safety seeking behaviours. These are illustrated in Figure 4.

*Figure 4: The relationship between threat appraisals and maintaining factors in anxiety disorders (Salkovskis, 1996)*

Diagram: 
- Potentially threatening stimuli (situations, sensation, thoughts)  
- (Selective attention)
- Threat appraisal:  
  - (Probability x awfulness)  
  - (coping + rescue)
- (Prevent disconfirmation, increase symptoms)  
- Safety-seeking behaviours (avoidance escape, within-situation behaviours, neutralising, checking, reassurance-seeking)  
- (Arousal)
- Physiological and biological changes
Physiological arousal refers to the hypothesis that clients with panic attacks have a tendency to misinterpret bodily sensations as a sign of imminent danger. A negative feedback loop occurs where normal bodily sensations are seen as a sign of danger (e.g. a heart attack) thereby triggering off more sensations, which feeds back into the catastrophic misinterpretation. In this way, a full-blown panic attack occurs. Salkovskis and Hackmann (1997) suggest that the misinterpretations are based on an individual's previous experience of these symptoms and their meanings. Selective attention refers to an individual actively seeking information that confirms their beliefs, and ignoring information that disconfirms their hypotheses. From the cognitive model it is hypothesised that people do not get disconfirmation about their misinterpretation of bodily sensations due to avoidance of the situation, and also more subtle avoidance such as "safety behaviours". Avoiding the situation is reinforced due to an absence of panic attacks, and therefore the situation is more likely to be avoided again. However, people also attribute other factors to explain why they did not panic. An example of this is walking with a shopping trolley in the street under the belief that if the trolley was not there, the person would faint, and panic. Therefore, the shopping trolley prevents the person disconfirming their catastrophic beliefs about what would happen if they went out without the trolley. Avoiding the situation and the presence of safety behaviours result in the distorted beliefs about threat appraisal being maintained. If there is an image of the potential threat, and how the person will cope, then avoidance and safety behaviours mean that this image is not disconfirmed. If images do exist in agoraphobia concerning the threat, and the
ability for the person to cope, then imagery could be contributing to the maintenance of the disorder.

**Why explore imagery in agoraphobia?**

This thesis asks whether exploring the themes and interpersonal meanings of the imagery in those with agoraphobia is helpful to understanding the disorder. As can be seen in the section discussing agoraphobia, imagery may be playing a role in maintaining the disorder by overestimating the possibly of threat, and underestimating the ability to cope. From studies on health anxiety (Wells & Hackmann, 1993) and social phobia (Hackmann, Clark & McManus, 2000), it can be seen that exploring the imagery in a disorder may also uncover early memories that may be associated with the onset of the disorder.

This study proposes to be the first rigorous investigation exploring imagery and associated memories in people with agoraphobia. Two studies have looked at the imagery in agoraphobia, however one study has not been published, and the other used individuals with agoraphobia as a control group so the imagery was not explored specifically.

In the unpublished study, Hackmann and Surawy (in preparation) found that people with agoraphobia have recurrent images. They see themselves in the image from an external viewpoint and the themes of their imagery are similar to those in panic disorder such as isolation, panic, entrapment and loss of control (Cook, Melamed, Cuthbert, McNeil & Lang, 1988; Marks, 1969). The authors
suggest that people with agoraphobia also see an interpersonal context in the image.

In the only published study, Wells and Papageorgiou (1999) used people with agoraphobia as a control group for a study looking at the predominant impression that images are viewed in social phobia. The researchers predicted that as people with agoraphobic have social-evaluative concerns, they would react in the same way as people with social phobia, but to a lesser extent. That is to view themselves from an observer perspective (being outside of one’s body looking back at the self) during social images, and a field perspective (inside one’s body looking out through one’s own eyes) for non-social images. The study looked at the imagery of twelve people with agoraphobia. The participants were asked to recall a situation where they felt anxious in a social situation. Details of the image were not asked, but participants were asked whether their perspective in the image was that of an observer or a field perspective. Next, participants were asked to recall a scene where they felt relaxed in a non-social situation. Again, details of the situation were not gained, but the perspective view was asked. The study found that people with agoraphobia used an observer perspective (that is seeing themselves from an observer’s view point) for both social and non-social images, unlike people with social phobia who shift between the two perspectives (that is an observer perspective in social images, and a field perspective, looking out their own eyes in non-social images). The researchers suggest that people with agoraphobia might have a “chronic and stable perspective” of seeing themselves as an observer in their images due to a wide range of situations leading to a processing of the public self-image.
However, as details of the memory were not taken, it is not known what the participant was imagining. Also, as the anxiety image was asked about first, the participants may still be anxious when asked about the neutral image, and this may affect the results. Furthermore, unlike previous studies looking at perspective in social phobia (Hackmann, Surawy & Clark, 1998; Wells, Clark & Ahmad, 1998), this study asked participants to recall actual past situations, rather than an image of potential threat, which would be interesting when thinking about maintenance of the disorder. There are no published papers on the characteristics of imagery in agoraphobia, such as whether the images are recurrent, the sense modalities utilised, vividness and clarity of images, and how real the images seem. This seems useful information so a full description of the phenomenon can be gained.

**Summary of the sections on imagery and agoraphobia**

From the section on imagery, it could be seen that imagery is core cognition that uses all the sense modalities. It has significant input into memories, and contains levels of meaning that can be accessed faster and more efficiently than through verbal thought. Imagery is also linked to emotion. Those who experience anxiety disorders display high levels of imagery.

Research exploring the imagery in psychological disorders suggests that images have different uses: to protect and to threaten the individual. It seems usual in anxiety disorders that the images of the situation are more negative and threatening than the reality. Thus, images can contribute to maintaining the disorder. The content of images has also been linked to past memories for the
individual, which may have occurred around the onset of the disorder, or relate to the schemas that are activated by the present condition. It has been suggested that suppressing images, encourages more to be produced. It was also highlighted in the section exploring treatment work using imagery techniques with those with anxiety disorders that the treatments have been shown to be successful particularly for social phobia and PTSD.

**Aims of present study**

There has been no published study exploring the imagery specifically in those with agoraphobia. Exploring the imagery in those with agoraphobia will provide information as to whether it is helpful for clinicians to routinely ask about images in agoraphobia, and whether such images can be used to understand the maintenance and possible onset of the disorder.

In this thesis, a group of people with agoraphobia, and a non-symptomatic control group matched for age, sex, ethnicity, and years in education, will be interviewed about their imagery. An Imagery Interview (Hackmann, Clark & McManus, 2000), which is a semi-structured interview, will be modified for use in this study. This interview was used in a recent study exploring imagery and early memories in people with social anxiety (Hackmann, Clark & McManus, 2000). Using this interview, the themes of the agoraphobic imagery will be explored and the meaning of these images for the individual in terms of self, others and the world. Other qualities about the imagery will be explored, such as the perspective of the image, sensory qualities, and the vividness of the image. Participants will also be asked to think about a past memory that may be
related to this imagery, and what the meaning and significance of this memory is. Participants will also be asked whether the memory occurred at a similar time to the development of the disorder. A section asking about relaxation imagery will be added to ease people into talking about their imagery.

Differences between this study and past research

The main differences of this project from previous studies are:

1. A larger sample of people with agoraphobia, and the use of a normal control group.

2. Questions concerning the age of onset of agoraphobia.

3. The introduction of a relaxation scenario, and questions asked about a description, the sense modalities used, the perspective the image is seen from, plus the clarity, vividness, and reality of this image.

4. The use of agoraphobic scenarios in case the imagery is difficult to induce spontaneously.

5. A description of the content of the recurrent images, and themes that emerge. Plus characteristics of the image in terms of sense modalities, perspective, clarity, vividness, and reality.

6. A choice given between whether people have an internal perspective (that is, seeing out their own eyes) or an external perspective (that is, as if watching themselves as an observer) in the image and the memory, plus the introduction of an alternating perspective between the two perspectives.

7. A question relating to whether the image feels "real", and a scale of 0-10 to denote how real it feels.
8. A visuo-spatial task used between the description of the image and the memory to prevent emotional contamination between the two.

9. A description of the associated memories, and themes that emerge. Plus characteristics of the image in terms of sense modalities, perspective, clarity, vividness, and reality.

10. The use of content analysis (Smith, 2000) to analyse the emerging themes in the image and the associated memory.

11. An independent coding made of the emotional valence of the memory. The emotional valence scale was also operationalised.

12. Follow-up questionnaires sent one week after the interview to monitor any changes in behaviour, thoughts or mood.

The semi-structured questionnaire is designed to give qualitative and quantitative data. The quantitative data will be analysed using SPSS 10.0 for Windows (SPSS). The qualitative data, exploring the themes and the meanings of the imagery and the memory, will be analysed using a content analysis approach. Content analysis can be used to reduce qualitative material to a more manageable form and to transform it into quantitative data such as category frequencies (Smith, 2000). Using this technique, verbatim answers to open ended questions (such as asking for a description of recurrent imagery) can be classified into themes that emerge from the data being analysed. It is hoped that using this approach, rather than a gaining structured quantitative data, means that a fuller understanding of the phenomenon (imagery) can be gained, as exploring imagery in agoraphobia is still at an exploratory stage. Willig (2001) calls the use of content analysis to "score" the material a "little q" approach. She
argues that using this technique of incorporating non-numerical data into hypothetico-deductive research designs is not in the spirit of qualitative methodology. However, this method was chosen for the thesis, as the design is hypothesis led plus the researcher-defined categories and the frequency count of those categories seemed important information to gain for the questions asked in this study.

Research Questions

In this study, five main research questions will be looked at. These will be summarised in Table 3 at the end of the chapter.

1. **Imagery phenomenon.** To find out whether people with agoraphobia have recurrent images. If so, a description of the qualities of the images people with agoraphobia have about agoraphobic situations will be gained. Information will be asked about whether images are recurrent, the situations they occur in, the sense modalities involved in the images, the perspective of the image and other characteristics such as clarity, vividness, and how real the image seems. This information will be gained in a quantitative form, and compared to the images in the non-symptomatic control group to see whether the qualities are specific to people with agoraphobia. A within sample comparison will also be made between the characteristics of imagery in the relaxation scenario and a fear scenario to explore whether there are any differences between the situations. Emotional valence will also be scored for the fear imagery by a neutral rater using a scale of -3 to +3 (see Hackmann, Clark & McManus, 2000).
2. **Associated memories.** To find out whether people with agoraphobia have memories that are linked to their imagery. If so, a description of associated memories to the agoraphobic images will be gained. Information about the associated memory will be gained, such as age of memory, sense modalities utilised, perspective of the memory, and further characteristics such as clarity, vividness, and how real the memory seems. This information will be gained in a quantitative form, and compared to the memories in the non-symptomatic control group to look at differences. A comparison of the emotional valence of the memory will be gained to compare the memories of the symptomatic group compared to the control group.

3. **Themes in images and associated memories.** Individuals with agoraphobia will be asked for a description of recurrent themes in their imagery linked to an agoraphobic situation, compared to a matched non-clinical sample. This will be asked as a qualitative question in the interview. The themes in the imagery will be explored using a content analysis approach. It is expected that the themes in the agoraphobic situations will be similar to those found in studies exploring imagery in panic disorder (Cook, Melamed, Cuthbert, McNeil & Lang, 1988; Marks, 1969) and preliminary agoraphobic studies (Hackmann & Surawy, in preparation) such as isolation, panic, entrapment and loss of control. It is hypothesised that the themes will also suggest an overestimation of the danger faced, and an underestimation of their levels of coping (Clark, 1988; Salkovskis, 1988, 1991; Salkovskis, Clark & Gelder, 1996). Following the study exploring imagery in social phobia (Hackmann, Clark & McManus, 2000), it is hypothesised that the meaning of the imagery will have negative implications.
about the self, others and the world. The themes will be compared to those gained by the matched control.

Following work by Hackmann, Clark and McManus (2000), it is thought that the imagery may be related to a past traumatic memory that occurred around the onset of the disorder. Participants will be asked about associated memories. The themes of the associated memories will be analysed using a content analysis approach and the meaning of the memory will also be gained. The themes of the memory will be compared to a matched control group.

The similarity of the themes of the memory and imagery will be compared through a content analysis approach, and quantitative questions in the interview where the participant evaluates the similarity. A quantitative question will also be asked about the effect of this memory of the disorder.

4. **Links between memory and onset of the disorder.** The relationship between the memory linked to the agoraphobic situation and the onset of agoraphobia will be explored using a quantitative question in the semi-structured interview. This will be explored following work suggesting memories linked to imagery in social anxiety occurred around the time of onset of the disorder (Hackmann, Clark & McManus, 2000).

5. **Possible beneficial impact of interview.** Following work into imagery rescripting (Arntz & Weertman, 1999) and how uncovering images in one interview may be clinically useful (Hackmann, 1998), it is hypothesised that
uncovering past memories and exploring the fear image might lead to improvements in agoraphobic behaviour. Questionnaires will be given at the time of the interview, and a week after the interview to see whether there is any change in symptomatic behaviour. This will be presented as quantitative data.

Table 3: Main aims summarised

<table>
<thead>
<tr>
<th>Aims of this thesis</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To explore whether people with agoraphobia have recurrent imagery. If so, find</td>
<td>Quantitative</td>
</tr>
<tr>
<td>out qualities and characteristics of the imagery and compare to a normal control.</td>
<td></td>
</tr>
<tr>
<td>2. To explore whether the sample have memories linked to their images. If so, find</td>
<td>Quantitative</td>
</tr>
<tr>
<td>out qualities and characteristics (including emotional valence) of these memories</td>
<td></td>
</tr>
<tr>
<td>and compare to a normal control.</td>
<td></td>
</tr>
<tr>
<td>3. To explore the themes emerging from the transcripts from both groups in the</td>
<td>Qualitative and</td>
</tr>
<tr>
<td>imagery described and the content of the associated memory. Compare the themes from</td>
<td>quantitative</td>
</tr>
<tr>
<td>the two groups.</td>
<td></td>
</tr>
<tr>
<td>4. To explore whether there is a link between the associated memory described and</td>
<td>Quantitative</td>
</tr>
<tr>
<td>the onset of the disorder.</td>
<td></td>
</tr>
<tr>
<td>5. To monitor if there is a possible beneficial impact of the interview by</td>
<td>Quantitative</td>
</tr>
<tr>
<td>administering follow-up questionnaires one week after the interview and compare to</td>
<td></td>
</tr>
<tr>
<td>a normal control.</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 2:
METHOD

Overview
Two groups of participants were interviewed for this study: a group of currently symptomatic people with agoraphobia, and a non-symptomatic control group. The interviewer saw each participant individually to administer the protocol. This consisted of six questionnaires that measured various aspects of depression, anxiety and specifically agoraphobia, and a semi-structured interview that explored recurrent imagery and related memories in agoraphobic situations. Six of the same questionnaires measuring anxiety, depression and agoraphobia were given to the participants to fill in one week after the initial interview.

Participants

Power Analysis
It was difficult to calculate a power analysis to determine sample size as this study is exploratory. However, in Wells and Papageorgiou’s (1999) study of the imagery perspective in those with social anxiety and those with agoraphobia, twelve participants with agoraphobia were interviewed. In Wells and Hackmann’s (1993) study of imagery in health anxiety, ten participants were interviewed and no control participants. In the most similar study methodologically, Hackmann, Clark and McManus (2000) interviewed twenty-two participants with social anxiety, and no control participants, about their imagery and related memories. Therefore it was calculated that interviewing
twenty-six participants with agoraphobia and a matched control would yield 80% power to detect a large effect size at .05.

**Sampling method**

Two groups of people participated in this study: twenty people who were currently experiencing symptoms of agoraphobia, and a matched non-symptomatic control group.

Participants who were currently experiencing symptoms of agoraphobia were approached in three main ways. Firstly, psychology staff meetings in adult mental health and older adult departments in two inner city boroughs were attended to advertise the study, and to gain names of Clinical Psychologists who were working with clients with agoraphobia. Once names of the psychologists were gained, these people were contacted fortnightly to discuss whether there were any people with agoraphobia on their caseload, or on the waiting list. If the psychologist had just started working with a client, then an information sheet (see Appendix 2) about the study and a tear off slip with a stamped addressed envelope addressed to the interviewer was given by the psychologist to the client. The tear off slip asked the client for their contact details and whether they wanted to hear more about the study. Once the interviewer had received a slip with an affirmative response, a telephone call followed to explain more about what the study involved. If the client was still interested, an appointment was made. Twelve clients who had just started therapy, but were pre-treatment, were gained in this way. Five further clients who agreed to take part, and made an appointment time, changed their minds as this time approached. So they were not interviewed. If the client was still on the waiting
list, the information sheet and tear-off slip was sent to their address, and the same protocol was followed. One client agreed to take part through this route, from the ten that were written to.

Secondly, following a presentation of the study at a therapy group of twelve people with agoraphobia, three clients agreed to take part. The four other participants responded to an advert about the study in the “No Panic” newsletter. “No Panic” is a self-help organisation on the internet that people experiencing panic can subscribe to for advice (www.no-panic.co.uk). Other methods of recruitment such as posters in GP surgeries and psychology departments, contacting all the GP surgeries in two boroughs, contacting other self-help organisations and approaching psychologists and other members of multidisciplinary teams in different departments were unsuccessful.

The non-symptomatic group was 20 people matched for age and sex who were contacted through a local hairdressers. The hairdresser was able to ask people that she thought would be interested. These people did not score significantly on the agoraphobic questionnaires, and did not report any agoraphobic fears.

Each participant, from both groups, received £5 for taking part in the study.

**Inclusion and exclusion criteria**

The symptomatic sample required for this study was a group of people with agoraphobia. Therefore, all the participants in the symptomatic group fulfilled DSM-IV criteria for Panic Disorder with Agoraphobia. In most cases, the
General Practitioner (G.P) or clinician responsible for their care provided this diagnosis. Where this information was not available (in the case of the cases gained through the internet), the interviewer used clinical judgement for the diagnosis. People with co-morbid diagnoses were not excluded, although their diagnoses were noted. In the sample, three participants also fulfilled criteria for PTSD, and one participant for obsessive- compulsive disorder.

Taylor (2000) suggests that panic disorder (with or without agoraphobia) is commonly comorbid with other disorders. The most common comorbid anxiety disorders include social phobia (occurring in 15-30% of people diagnosed with panic disorder), obsessive- compulsive disorder (8-10%), specific phobia (10-20%), and generalised anxiety disorder (25%) (DSM-IV). Among people who develop panic disorder, 50-65% will develop major depression during their life (Taylor, 2000). In one study, it was found that 48% of the panic disordered patients also met DSM-IV criteria for hypochondriasis (Furer, Walker, Chartier & Stein, 1997). In clinical settings, research suggests 40-50% of patients with panic disorder also meet criteria for one or more personality disorders (DSM-IV), most commonly avoidant, dependent and histrionic personality disorders (Stein, Hollander & Skoder, 1993). Therefore the comorbidity present in the people with agoraphobia in this study was not unusual.

**Numbers at each stage**

There were twenty people in each group who took part in the first stage of the study (i.e. filling in the six questionnaires and answering questions from the semi-structured interview). The second stage involved filling in the six
questionnaires a week later and sending the questionnaires to the interviewer.

In the symptomatic group the second stage was completed by 13 people (65%) and in the control group by 11 (55%) people.

**Basic demographics**

**People with agoraphobia**

The symptomatic group consisted of 5 males and 15 females. The mean age was 48.9 years (SD=16.3 years), with a range from 24 years to 78 years. All participants described their ethnicity as White British. The mean number of years that the group had spent in education was 11.95 years (S.D.=2.7 years), with a range from 9 years to 17 years. The mean number of years that the sample described that they had experienced agoraphobic fears for 14.5 years (S.D.= 16.3), with a range from 1 year to 53 years. In the people with agoraphobia, the mean age for the onset of agoraphobia was 34.5 years (SD=11.6), with a range of 22-57 years.

**The control group**

The control group consisted of 5 males and 15 females. The mean age was 48.3 years (S.D.= 18.9 years), with a range from 24-82 years. The mean number of years that the sample had spent in education was 13.5 years (S.D.= 5.2 years), with a range of 7-20 years. All participants described their ethnicity as White British.
There were no significant differences between the groups with regard to gender, age ($t(38)=.099$, $p=.92$) or years in education ($t(28.2)=-1.15$, $p=.26$). (See Table 4)

**Table 4: Demographic details of the people with agoraphobia and the control**

<table>
<thead>
<tr>
<th>Age (mean, SD, Range)</th>
<th>Sex</th>
<th>Years in education (mean, SD, Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agoraphobic group</strong></td>
<td>48.9 (16.3) 24-78</td>
<td>5 males 15 females</td>
</tr>
<tr>
<td><strong>Control group</strong></td>
<td>48.4 (18.9) 24-82</td>
<td>5 males 15 females</td>
</tr>
<tr>
<td><strong>Differences between groups:</strong></td>
<td>$t(38)=.099$, $p=.92$</td>
<td>$t(28.2)=-1.15$, $p=.26$</td>
</tr>
</tbody>
</table>

**Ethics**

Ethical approval was gained through the Joint UCL/UCLH Committee on the Ethics of Human Research, Camden and Islington Local Research Ethics committee, and East London and City Local Research Ethics committee (See Appendix 1).

**Procedure**

The procedure was the same for the symptomatic group and the control group. The procedure is summarised in Figure 5 (pg. 67). All of the participants read and signed an informed consent form (see Appendix 4) before the interview began. It was explained that the interview would be recorded to help the interviewer recall the information, if the participant did not object. The participant was told that the tape recording would be confidential and would not have any distinguishing features to identify the person. It was also explained that the data collected was confidential, and again no distinguishing features to
identify the person would be kept with the raw data. The participant's date of
birth, gender, ethnicity, and number of years spent in education were recorded
on the interview schedule. Participants in the symptomatic group were asked the
age of onset of their agoraphobic fears.

It was explained to the participant that the procedure would take approximately
an hour, but some follow-up questionnaires would need to be filled in the
following week. Participants were told how there were six questionnaires with
questions that would be read to them, that would be followed by an interview
that would focus on their imagery in relaxing and anxious situations. All
participants were told that the interview could be stopped at any time, and if
they did not want to answer any question, that was acceptable. The interview
was tape recorded from this point.

The interviewer read out all the questions on the six questionnaires to the
participant. This was done for a number of reasons: to build up rapport with the
individual, to answer any questions that the participant may have about the
questions, to monitor an individual's anxiety level, and for the interviewer to
have an idea about the level of avoidance. When the questionnaires were
completed, the modified Imagery Interview (Hackmann, Clark & McManus,
2000) was administered.

After the interview was completed, participants were asked how they were
feeling and whether they wanted to talk or ask questions about anything that
came up in the interview. Following answers to these questions, the participants
were thanked for their participation and given £5. Participants were reminded
that six questionnaires would be sent to them in a few days for them to fill in
and would need to be returned via post a week later. Participants, who were
under the care of a psychologist, or on the waiting list, were asked if they
wanted a summary of what they spoke about in the interview and scores on the
questionnaires given to the clinician responsible for their treatment. If this was
required, the information was passed on. None of the sample requested that
information be passed on to their clinicians.
Figure 5: Overview of procedure

Experimental group

Contact:
Names gained through waiting lists, clinicians in psychology departments and self-help groups. Contact either made through clinician, a postal invitation to participate or advert in a newsletter. Participant sends back tear-off slip to inform interviewer if they are interested in the study. Interviewer phones client to give further information about study and answer questions. If client is interested, appointment in client’s house arranged.

Appointment:
At appointment in participant’s home, consent gained and protocol followed: read questions from the six questionnaires, and the Imagery Interview conducted. Participants reimbursed for time.

Few days after appointment:
Six follow-up questionnaires sent to participant and an SAE enclosed so questionnaires could be returned via post.

Feedback:
Feedback given to clinician if wanted by participant

Control Group

Participants matched for age, number of years in education, and sex found through a local hairdressing salon.

Appointments made in participants’ home or a room in the university.
Consent gained and protocol followed: read questions from the six questionnaires, and the Imagery Interview conducted. Participants reimbursed for time.

Six follow-up questionnaires sent to participant and an SAE enclosed so questionnaires could be returned via post.
Measures

The measures described below are the six questionnaires used to describe the sample in terms of various aspects of anxiety, depression, specifically agoraphobia, and the Imagery Interview that was used to explore images in relaxing and fearful situations, and related memories. The measures are summarized in Figure 6 (pg. 73).

Questionnaires

All participants completed the six following questionnaires at the time of the interview, and were all given to the participants one week after the interview: the Agoraphobic Cognitions Questionnaire (ACQ: Chambless, Caputo, Bright & Gallagher, 1984), the Beck Anxiety Inventory (BAI: Beck, Epstein, Brown & Steer, 1988), the Beck Depression Inventory (BDI: Beck, Ward, Mendelsohn, Mock & Erbaugh, 1961), the Body Sensations Questionnaire (BSQ: Chambless, Caputo, Bright & Gallagher, 1984), the Fear Questionnaire (FQ: Marks & Mathews, 1979) and the Mobility Inventory for Agoraphobia (MI: Chambless, Caputo, Jasin, Gracely & Williams, 1985). These questionnaires were used to describe the sample and distinguish between the two groups. The questionnaires are described in further detail below:

Agoraphobic Cognitions Questionnaire (ACQ: Chambless, Caputo, Bright & Gallagher, 1984) is often used along with the Body Sensations Questionnaire (BSQ: Chambless, Caputo, Bright & Gallagher, 1984) to assess “fear of fear” among those with agoraphobia. The ACQ is a 14- item, self- report questionnaire that asks respondents how frequently particular thoughts occur
when they are nervous or frightened. Each thought is rated on a 5-point scale ranging from “thought never occurs” to “thought always occurs when I am nervous”. The items consist of catastrophic thoughts about the consequences of anxiety that load on one of two factors, accounting for 46% of the variance (Chambless, 1988a): physical consequences (such as “I am going to throw up”) or social/behavioural consequences (such as “I will be paralysed with fear”). The items can be totalled to gain an overall score (ACQ-T), or split into two 7-item subscales to gain a subtotal of thoughts of physical catastrophe (ACQ-PC) and worries of social or behavioural calamity (ACQ-SB) (Chambless & Gracely, 1989). The ACQ has shown to be reliable over time (8-day r=.86; 31-day r=.75). It has also been shown to be able to discriminate people with agoraphobia from a normal sample, people with depression, and clients with other anxiety disorders such as social phobia, generalised anxiety disorder and obsessive compulsive disorder (Chambless, Caputo, Bright & Gallagher, 1984).

**Beck Anxiety Inventory** (BAI: Beck, Epstein, Brown & Steer, 1988) measures to what extent the respondent was concerned or bothered by particular anxiety symptoms in the past week. The questionnaire consists of 21 anxiety symptoms, such as “numbness or tingling” and “fear of dying” which the respondent rates on a 4-point scale ranging from “not at all” to “so severe I could barely stand it”. The BAI has shown to have high short-term retest reliability (Beck, Epstein, Brown & Steer, 1988), and concurrent, convergent and discriminant validity (Beck & Steer, 1991). Total scores can range from 0 to 63. Norms range between 0-43 (M=6.6, SD=8.1) (Gillis, Haaga & Ford, 1995).
**Beck Depression Inventory** (BDI: Beck, Ward, Mendelsohn, Mock & Erbaugh, 1961) is a 21-item self-report questionnaire that measures depressive symptomology. Each item has a choice of four statements (involving symptoms and attitudes) of increasing severity for the respondent to circle the statement that best describes the way they have been feeling in the last week. The questionnaire takes about 5-10 minutes to complete, and is scored by summing the ratings of the 21 items. Beck and Beamesderfer (1974) suggested the following cut-off scores for the questionnaire: (a) none or minimal depression <10; (b) mild to moderate depression is 11-17; (c) moderate depression is 18-29; and (d) severe depression is 30-63. Scores >18 are suggested to be indicative of possible depressive symptomology (Steer & Beck, 1988). The BDI's test-retest reliability for short intervals, such as a week, range within the .80s for both psychiatric and normal populations (Steer & Beck, 1988). The questionnaire has been shown to have high concurrent, construct and factorial validity (Steer & Beck, 1988).

**The Body Sensations Questionnaire** (Chambless, Caputo, Bright & Gallagher, 1984) is a 17-item self-report questionnaire in which respondents rate on a 5-point scale (not frightened to extremely frightened) how frightening they find particular symptoms of anxiety. Used with the ACQ (Chambless, Caputo, Bright & Gallagher, 1984), the questionnaire assesses “fear of fear” among people with agoraphobia: the fear of one’s own response to anxiety cues (Goldstein & Chambless, 1978). The BSQ is shown to be moderately reliable over time (31-day retest r=.67; 8-day r=.66), and has significantly discriminated between people with agoraphobia and a normal control, a depressed sample, and...
clients with other anxiety disorders (Chambless, Caputo, Bright & Gallagher, 1984).

**Fear Questionnaire** (FQ: Marks & Mathews, 1979) is a self-rated form that measures the severity in phobic symptoms and anxiety and depression in phobic clients. The questionnaire yields four scores: the first is an avoidance score (0=not avoided, 8=always avoided) of a main target phobia that the respondent defines; the second is a total phobia score that is made up from the sum of avoidance (0=not avoided, 8=always avoided) of fifteen common phobic situations. The ratings can be divided into three sub scores: Agoraphobia, Blood-Injury and Social Phobia. All have a range of between 0-40. The third score is a rating of the present state of phobic symptoms (0=no phobias present, 8=very severely disabling phobias). Finally, there is an anxiety and depression score which is made up of five common symptoms encountered by phobic clients. The test-retest reliability of the FQ ranges from .79 for global phobia to .96 for Blood–Injury. Studies have shown that the FQ distinguishes between those with agoraphobia and those with social phobia, and between those with agoraphobia and a normal control (Cox, Swinson & Shaw, 1991). In a treatment trial of 640 people with phobias, Marks and Mathews (1979) found that the total phobia scores (the scores of the three sub scores added together) for people with agoraphobia was 58.4. The sub score of those with agoraphobia on the Agoraphobia subscore was 25.3 (Marks & Mathews, 1979).

**Mobility Inventory for Agoraphobia** (MI: Chambless, Caputo, Jasin, Gracely & Williams, 1985) is a self-report questionnaire that has two sections. The first
section measures self-reported avoidance in 26 situations on a five-point scale indicating how often the situations are avoided when the respondent is alone, or accompanied. The scale runs from “never avoid” (1) to “always avoid” (5). The second section asks the respondent to report how many panic attacks they have experienced in the last week, and how intense these have been on a 5-point scale ranging from “very mild” (1) to “extremely severe” (5). The MI has shown to be reliable over test-retest intervals (31 days= .75; 8 days= .90). The questionnaire has been shown to distinguish well between agoraphobic and non-agoraphobic samples (r=.58) (Chambless, 1988b).
**Method**

Figure 6: Summary of questionnaire measures used in the study

<table>
<thead>
<tr>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics:</strong></td>
<td>Verbally asked date of birth, number of years in education, and their sex noted. Age of onset of agoraphobia asked.</td>
</tr>
<tr>
<td><strong>Agoraphobia:</strong></td>
<td>Agoraphobic Cognitions questionnaire (Chambless et al., 1984) &lt;br&gt;Body Sensations Questionnaire (Chambless, Caputo, Bright &amp; Gallagher, 1984), &lt;br&gt;Fear Questionnaire (Marks &amp; Mathews, 1979) &lt;br&gt; Mobility Inventory for Agoraphobia (Chambless, Caputo, Jasin, Gracely &amp; Williams, 1985)</td>
</tr>
<tr>
<td><strong>Affective State:</strong></td>
<td>Beck Anxiety Inventory (Beck, Epstein, Brown &amp; Steer, 1988) &lt;br&gt;Beck Depression Inventory (Beck, Ward, Mendelsohn, Mock &amp; Erbaugh, 1961)</td>
</tr>
<tr>
<td><strong>Interview:</strong></td>
<td>Modified Imagery Interview (Hackmann, Clark &amp; McManus, 2000)</td>
</tr>
<tr>
<td><strong>One week later:</strong></td>
<td>Agoraphobic Cognitions questionnaire (Chambless et al., 1984), &lt;br&gt;Beck’s Anxiety Inventory (Beck et al., 1988) &lt;br&gt;Beck’s Depression Inventory (Beck et al., 1961) &lt;br&gt;Body Sensations Questionnaire (Chambless et al., 1984), &lt;br&gt;Fear Questionnaire (Marks &amp; Mathews, 1979) &lt;br&gt;Mobility Inventory for Agoraphobia (Chambless et al., 1985)</td>
</tr>
</tbody>
</table>
The Interview

Imagery Interview (Hackmann, Clark & McManus, 2000) is an interview schedule that was modified to use in this study. The interview consists of semi-structured questions that are read verbally to each participant and the responses transcribed verbatim. The administration of the interview takes approximately 30 minutes and the questions are asked in a fixed order. Some of the questions require a rating scale that the interviewer displayed at the relevant times. The details of the interview are displayed below, and have been separated into four sections for clarity.

Section 1: Relaxation images. This is a section that was added to the Imagery Interview to encourage the participant to use imagery in a scenario that would not be too threatening, and so the interview starts in a way that relaxes the participant. The participant is asked to close their eyes, and imagine a scenario on a beach: the sea, the sand, and a dog on the beach. The participant is then asked questions about this scene focusing on the sensory characteristics, the physical sensations present in their bodies, cognitions, and emotions that might be present in the image. The participants are also asked if their viewpoint in the image is internal, of seeing out their own eyes, or external, as if viewing the self as an observer. Questions are also asked about the vividness, clarity, and reality of the image. These properties were rated on an 11-point scale ranging from (0) "not at all" to (10) "the most it could be". Participants were also asked about how anxious the image made them feel.
**Method**

**Section 2: Agoraphobic Images.** Next, participants with agoraphobia were asked to recall typical, recurrent images they experience when they are in agoraphobic situations. If a participant could not recall an image they have in anxiety-provoking situations, one of four typically agoraphobic scenarios to be read to the participant to encourage the imagery. The transcripts were added to the Imagery Interview and constructed using the themes in the Fear Questionnaire (Marks & Mathews, 1979) (See Appendix 6). The scenarios consisted of five themes: travelling alone by tube, walking alone down a busy street, going into a crowded shop, going alone far from home, and large open spaces. It was thought that the scenarios might need to be used as many of the participants had not started therapy and might not be used to thinking about their images. The transcripts were also used to encourage imagery in the non-symptomatic control group. In the control group, participants were asked which scenario out of the five would make them most anxious.

Once the participant indicated they had an image in mind, they were asked a series of questions about it. These questions included information about the sensory aspects of the image, physical sensations cognitions and emotions that were present in the image. The interviewer left time for an unstructured response primarily, then presented a number of options that the participant could rate on an 11-point scale ranging from (0) “not at all” to (10) “the most it could be”. The participant was also asked if their viewpoint in the image was internal (seeing out their own eyes) or external (as if viewing yourself). Similar to the relaxation imagery, questions about the vividness, clarity, controllability and reality of the image were rated on an 11-point scale ranging from (0) “not at all” to (10) “the most it could be”. The participants were also asked about how
anxious the image made them feel. (See Appendix 6 for exact questions).

Questions that were added to the Interview were all of the lists of options that are rated on scales, namely physical sensations, emotions and cognitions. This was to include some quantitative data to compare the rating of the image and the memory. Other questions that were added to the Imagery Interview explored properties like the vividness and the reality of the image.

After gaining a description of the image, participants were asked about the events that lead up to the image, how they are feeling in the image, whether the image makes them want to do anything, and what the worst thing about the image is. The meaning of the image was assessed by asking what the image meant “about you, about other people, and about the world”.

**Section 3: Link to Memories.** Participants were asked when in their lives they had first experienced the sort of emotions, thoughts, and sensations reflected in the image. Participants were then asked whether they could recall a particular memory that seemed closely linked to the image. Before a description and further information was asked about the particular memory, the participant was asked to engage in an anagram task for 5 minutes. This was added to the Imagery Interview to create a cognitive distractor task so the description of the memory was not contaminated by the description just given about the image (MacLeod, Williams & Bekerian, 1991).

After five minutes of the participant engaging in the anagram task, the participant was asked to describe the memory that seemed to closely resemble
the image. As with the previous imagery, information about the sensory characteristics of the image was gained, and information asked about the cognitions, physical sensations, and emotions the participant has in the memory. The participant was again asked about their viewpoint in the memory, whether internal (seeing out their own eyes) or external (as if viewing yourself). The worst thing about the image was asked and information as to what the memory told the participant about themselves, other people and the world. The clarity, vividness, controllability and reality of the memory was self-rated on an 11-point scale ranging from (0) “not at all” to (10) “most it could be”. Participants were also asked how anxious they felt at that point in the interview. (See exact questions in Appendix 6)

Section 4: Link between Memory and Image. Having given a description of a memory and an image, participants were asked, using an 11-point scale ranging from (0) “not at all” to (10) “the most it could be”, whether they thought the two descriptions were similar. Further questions were added to the Imagery Interview to ask more specific questions about the similarity, in terms of sensory content, emotional content, physical sensations, and interpersonal content. Participants were asked whether the event in the memory affected the agoraphobic symptoms in any way, and if so, how. (See Appendix 6 for exact questions)

Emotional Valence

The interviewer and a blind, independent coder rated the fear images and the associated memories on a 7-point emotional valence rating scale ranging from –
Method

3 (extremely negative) to +3 (extremely positive) (see Hackmann, Clark & McManus, 2000). The scale was operationalised using the scale shown below:

-3 = Death threat. Very fearful. Actual mental or physical catastrophe.
-1 = Worried about symptoms of anxiety. Quite fearful. Difficult situation.
0 = Neither positive or negative experience.
1 = Quite positive.
2 = Moderately positive.
3 = Extremely positive.

The inter-rater reliability of the two markers using Cohen’s Kappa (1960) was 0.99.

Interviewer

The author administered all of the interviews for this study. The interviews with the symptomatic group were conducted in their homes. If the clinician had not met the client, or had concerns about safety, an assistant psychologist accompanied her. This occurred on two occasions. In all cases, the interviewer phoned an arranged number to state address of client, time arrived, and time when she departed the house. The interviews with the control group were conducted either in their homes or in a room at the university.
Method of Analysis

Qualitative data: Content Analysis

The data gained through questions in the Imagery Interview asking about a description of the imagery, the meaning of the image, a description of associated memories, and the meaning of the memories, were analysed using a content analysis approach. The content analysis approach taken was that described by Smith (2000). The themes of the data were gained through using a priori methods (specifying categories from other research) and using an empirical method (of new categories emerging from the data). The transcripts were read and a list covering the emergent themes was compiled. Closely related themes from this list were grouped together under appropriate higher order themes. This resulted in an organised summary list of themes. A coding frame (Smith, 2000) was devised (see Appendix 7), which consisted of a list of the themes, and a definition of each theme. The transcripts and the coding frame were reviewed by a second marker to provide a check on validity. The interviewer went through all the transcripts and coded whether or not a particular theme was present in the transcript. Each theme could only be coded once in each transcript. The second marker also coded all the transcripts with the coding frame to provide inter reliability as to whether the theme was present or absent in each transcript. Queries or differences between the two coders were discussed to reach a consensus. Inter rater reliability was calculated using Cohen’s Kappa (1960).


Credibility checks

Cohen's Kappa (Cohen, 1960) was used to gain inter-rater reliability for the coding of the emotional valence of the images and associated memories, and the frequency of the themes, between the interviewer and an independent coder (a clinical psychologist). Cohen's Kappa is used to control for the times when the rater's agree by chance. The equation used to correct the percentage of agreement is:

\[ X = \frac{(Po - Pc)}{(1 - Pc)} \]

Where Po is the proportion of agreement observed (i.e. the total of the numbers in the agreement cells of the table divided by the grand total). To calculate Pc, the proportion of observations in each row and column is calculated, by dividing each row and column total by the grand total. Then the row and column proportions are multiplied by each other (Barker, Pistrang & Elliot, 1994).

Smith, Feld and Franz (1982) suggested that 85%, or interscorer correlations of 0.85 or more are regarded a satisfactory agreement. If differences existed between the coders, this was discussed and resolved, therefore the resolved coding is higher than the index of intercoder reliability suggests. The table of the inter-rater reliability scores for the frequency of the themes is shown in Table 17 (pg. 105) in the Results chapter.

"Owning one's perspective" (Elliot, Fischer & Rennie, 1999)

As the interviewer, my expectations for the themes emerging from the data came from past research looking at the themes in panic disorder, such as isolation, panic, entrapment and loss of control (Cook, Melamed, Cuthbert,
Method

McNeil & Lang, 1988; Marks, 1969) and preliminary agoraphobic studies
(Hackmann & Surawy, in preparation).

Quantitative data

Statistical analyses were performed on an IBM compatible system using the
statistical package for the social sciences for windows (SPSS for Windows
version 10.0; SPSS, 1999). Comparisons between people with agoraphobia and
the normal control were carried out on the variables measuring the
characteristics of the images and the memories. Chi square statistics were used
to test for significance. The scores on the questionnaires were compared
between the two groups using t-test statistics, with a bonferroni correction, and
repeated measures anova statistics.
CHAPTER 3: RESULTS

The results section will be presented in five sections corresponding to each research question. Summarised, section one relates to the description and characteristics of the agoraphobic image. Section two focuses on the description and characteristics of the associated memories. Section three presents a description and frequencies of the themes in the images and associated memories that emerged using a content analysis approach. Section four, the results of the relationship between the image and the onset of agoraphobia, and section five, the scores of the follow-up questionnaires filled in one week after the interview. These sections will be preceded by a description of the people with agoraphobia and the control group, plus an analysis of the group differences.

Distinguishing and describing the groups

In summary, there are two groups matched for age and sex: 20 participants with agoraphobia, and a normal control group.

Table 5 shows the differences between the two groups in terms of their responses on the questionnaires. A Bonferroni correction (dividing .05 by the number of tests conducted) was administered on the items due to the number of t-tests carried out. This method ensures that the overall error rate is no greater than .05.
Results

Table 5: Scores on questionnaires between the people with agoraphobia and the control group

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Agoraphobic group (n=20)</th>
<th>Control group (n=20)</th>
<th>t (df)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(mean, sd)</td>
<td>(mean, sd)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACQ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACQ-Total:</td>
<td>31.7 (9.5)</td>
<td>18.1 (4.4)</td>
<td>5.8 (26.9)</td>
<td>****</td>
</tr>
<tr>
<td>Physical concerns:</td>
<td>14.2 (5.1)</td>
<td>8.2 (1.6)</td>
<td>5.1 (22.7)</td>
<td>****</td>
</tr>
<tr>
<td>Social concerns:</td>
<td>17.6 (7.4)</td>
<td>9.9 (3.4)</td>
<td>4.2 (26.6)</td>
<td>****</td>
</tr>
<tr>
<td>BAI:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety score:</td>
<td>29.8 (9.8)</td>
<td>4.3 (3.3)</td>
<td>11.1 (23.3)</td>
<td>****</td>
</tr>
<tr>
<td>BDI:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression score:</td>
<td>24.1 (11.7)</td>
<td>6.3 (5.7)</td>
<td>6.0 (25.9)</td>
<td>****</td>
</tr>
<tr>
<td>BSQ:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How worried by symptoms:</td>
<td>39.4 (16.9)</td>
<td>21.7 (6.6)</td>
<td>4.4 (24.9)</td>
<td>****</td>
</tr>
<tr>
<td>FQ:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agoraphobia avoidance:</td>
<td>32.6 (5.4)</td>
<td>1.7 (2.0)</td>
<td>24.0 (24.0)</td>
<td>****</td>
</tr>
<tr>
<td>Blood-Injury avoidance:</td>
<td>16.3 (9.1)</td>
<td>6.2 (4.7)</td>
<td>4.4 (28.6)</td>
<td>****</td>
</tr>
<tr>
<td>Social avoidance:</td>
<td>20.6 (10.7)</td>
<td>6.6 (4.1)</td>
<td>5.5 (24.6)</td>
<td>****</td>
</tr>
<tr>
<td>Anxiety and depression:</td>
<td>24.5 (8.0)</td>
<td>9.0 (5.9)</td>
<td>6.9 (38)</td>
<td>****</td>
</tr>
<tr>
<td>Present state of phobia:</td>
<td>5.8 (1.4)</td>
<td>.5 (.8)</td>
<td>14.8 (38)</td>
<td>****</td>
</tr>
<tr>
<td>MIA:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance when accomp:</td>
<td>95.9 (15.6)</td>
<td>27.1 (6.8)</td>
<td>18.1 (25.9)</td>
<td>****</td>
</tr>
<tr>
<td>Avoidance when alone:</td>
<td>111.4 (13.6)</td>
<td>29.9 (9.1)</td>
<td>22.3 (38)</td>
<td>****</td>
</tr>
<tr>
<td>No. of panic attacks:</td>
<td>1.3 (1.8)</td>
<td>.1 (.3)</td>
<td>2.8 (20.1)</td>
<td>**</td>
</tr>
<tr>
<td>Intensity of panic attacks:</td>
<td>1.7 (1.8)</td>
<td>.0 (.0)</td>
<td>4.0 (19.0)</td>
<td>****</td>
</tr>
</tbody>
</table>

**ACQ**= Agoraphobic Cognitions Questionnaire; **BAI**= Beck Anxiety Inventory; **BDI**= Beck Depression Inventory; **BSQ**= Body Sensations Questionnaire; **FQ**= Fear Questionnaire; **MIA**= Mobility Inventory for Agoraphobia.

**** = significant at <.001 level
*** = significant at <.01 level
** = significant at <.05 level

As can be seen there were significant differences between the control and agoraphobic group on all measures. The people with agoraphobia had significantly more catastrophic cognitions (ACQ) when they felt anxious than the control group. The agoraphobic group also scored significantly higher on the general anxiety scale (BAI), scoring much higher than the normal range found by other researchers, for example a mean of 6.6 (SD=8.1) quoted by Gillis, Haaga and Ford (1995). The clinical sample were also more depressed and
scored within the moderate depression range of the BDI. The clinical sample were significantly more frightened by anxiety sensations (BSQ) than the control group. The people with agoraphobia also scored significantly higher on the Fear Questionnaire sub scores of agoraphobic, social and blood-injury avoidance. The highest score being for agoraphobic avoidance, which was a higher mean score than the samples found by other researchers, e.g., Marks and Mathews (1979). The total phobic avoidance score was also higher in this clinical sample than in the study by Marks and Mathews (1979), who found that interviewing 640 patients with agoraphobia, the mean total avoidance score was 58.4. The mean score for the agoraphobic participants on the present state of phobic symptoms on the FQ was 5.8, which is within the “markedly disturbing/disabling” range. It can also be seen that the avoidance scores when accompanied and when alone (MIA) for the clinical sample were very high compared to the control group.

1. Description of agoraphobic images (compared to control)

Whether images are recurrent

All the participants (100%) experiencing agoraphobic fears reported experiencing recurrent imagery in agoraphobic situations. None of the agoraphobic group needed to hear the scenarios prepared by the interviewer to induce the recurrent images. The imagery was recalled spontaneously. None of the control group had recurrent images in agoraphobic situations and all chose one scenario out of the choice of five to induce imagery of how it would feel to be in that situation.
Results

Situations they occur in

The imagery recalled by the agoraphobic group could be split into six situations.

The situations and frequency of the situation described in the imagery are shown below:

Table 6: Situations described in the imagery of the agoraphobic group

<table>
<thead>
<tr>
<th>Situations recalled in imagery</th>
<th>Number (n=20)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the street</td>
<td>7</td>
<td>35%</td>
</tr>
<tr>
<td>On public transport, e.g. bus, tube, train</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>In a shop</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>In a large open space</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>In a car</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>In a lift</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

As can be seen the imagery of eighty percent of the agoraphobic sample is of a scene set in a public place.

All the control group chose one of the five scenarios presented. Forty five percent (9) of the non symptomatic group chose the scenario, “being in a crowded shop”, twenty percent (4) chose “travelling by tube”, twenty percent (4) chose “walking in a busy street”, ten percent (2) chose going far from home, and five percent (1) chose being in a large open space”. 
Results

Characteristics of recurrent images:

Sense modalities in image

The participants were asked to describe the relaxation scene and their fear imagery, and were asked specifically about the modalities represented in these images. The modalities are shown below:

Table 7: Percentage of sense modalities reported in the relaxation and fear images

<table>
<thead>
<tr>
<th>Sense modality</th>
<th>Recurrent Image</th>
<th>Control group</th>
<th>Differences between gps.</th>
<th>$\chi^2$ (d.f)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relaxation image</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Sensations</td>
<td>5 (25%)</td>
<td>0</td>
<td>$\chi^2 (1)=5.7, **$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aural</td>
<td>14 (70%)</td>
<td>16 (80%)</td>
<td>$\chi^2 (1)=.53, p=.47$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch</td>
<td>3 (15%)</td>
<td>15 (75%)</td>
<td>$\chi^2 (1)=14.5, ****$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taste/ smell</td>
<td>12 (60%)</td>
<td>17 (85%)</td>
<td>$\chi^2 (1)=3.1, p=.08$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fear images</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>$\chi^2(1)=.14, p=.71$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Sensations</td>
<td>20 (100%)</td>
<td>17 (85%)</td>
<td>$\chi^2 (1)=5.2, **$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aural</td>
<td>9 (45%)</td>
<td>16 (80%)</td>
<td>$\chi^2 (1)=1.9, p=.17$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch</td>
<td>4 (20%)</td>
<td>8 (40%)</td>
<td>$\chi^2 (1)=8.5 , **$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taste/ smell</td>
<td>1 (5%)</td>
<td>9 (45%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

****= significant at <.001 level
***=significant at <.01 level
**= significant at <.05 level

Agora. = people with agoraphobia

All the participants in both groups reported visual images in both the relaxation and fear images. During the relaxation imagery, the agoraphobic group had significantly more body sensations than the control group. The agoraphobic group used significantly less touch representations, and showed a trend to use less taste and smell modalities than the control group. Similarly, in the fear imagery, the agoraphobic group had significantly less aural and taste and smell representations in the fear imagery of the agoraphobic group than the control group. However analysing only the control group over the two situations, the
Results

group had significantly more body sensations (McNemar’s Test, p<.001), and less taste and smell representations (p<.05) in the fear imagery than the relaxation imagery. This is similar to the agoraphobic group, who experienced significantly more body sensations (McNemar’s Test, p<.001) and less taste and smell representations (p<.001) in the fear imagery compared to the relaxation imagery.

**Perspective of the image**

The perspective taken in the imagery, whether internal, external or alternating between an internal and external perspective, is shown below. The table shows the perspective taken in the relaxation imagery, and the fear imagery for both groups:

**Table 8: Perspective taken in the two imagery situations**

<table>
<thead>
<tr>
<th></th>
<th>Relaxation imagery</th>
<th>Fear imagery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Int.</td>
<td>Ext.</td>
</tr>
<tr>
<td>Agora:</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Control:</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

*Agora* = Agoraphobic  
*Int.* = Internal perspective (looking out their own eyes)  
*Ext.* = External perspective (seeing themselves as if an observer)  
*Alternating* = Fluctuating between the two perspectives

There are no significant differences between the perspectives taken in the relaxation image between the two groups ($\chi^2 (2) = 1.7$, p= .4), however there are between the two groups in the fear situation ($\chi^2 (2) = 7.2$, p< .05). As can be seen from the table there is a shift of the agoraphobic group from an internal to an alternating perspective. Using McNemar’s Test shows this shift is significant.
Results

(p<.005) within the agoraphobic group, but not significantly different between the two scenes within the control group.

That is, the agoraphobic group were significantly more likely to view their fear imagery from alternating perspectives; that is fluctuating between the two perspectives, that is both internal (seeing out own eyes) and external (seeing self from an observer’s viewpoint).

Further characteristics of the images

All participants were asked to rate how clear, vivid and real the image in the relaxation image and fear image was. There were no significant differences between the groups on any of these variables.

Table 9: Further characteristics of the images

<table>
<thead>
<tr>
<th>Relaxed image</th>
<th>Agoraphobic group</th>
<th>Control</th>
<th>Diff</th>
<th>t(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity</td>
<td>8.5 (1.6)</td>
<td>8.7 (1.5)</td>
<td>-.62</td>
<td>(38)</td>
<td>.5</td>
</tr>
<tr>
<td>Vividness</td>
<td>8.0 (1.8)</td>
<td>8.3 (1.9)</td>
<td>-.51</td>
<td>(38)</td>
<td>.6</td>
</tr>
<tr>
<td>Reality</td>
<td>5.8 (3.4)</td>
<td>7.4 (2.0)</td>
<td>-1.8</td>
<td>(31.1)</td>
<td>.08</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fear image</th>
<th>Agoraphobic group</th>
<th>Control</th>
<th>Diff</th>
<th>t(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity</td>
<td>7.6 (2.6)</td>
<td>7.9 (2.1)</td>
<td>-.4</td>
<td>(38)</td>
<td>.7</td>
</tr>
<tr>
<td>Vividness</td>
<td>7.7 (2.3)</td>
<td>7.1 (2.7)</td>
<td>.69</td>
<td>(38)</td>
<td>.5</td>
</tr>
<tr>
<td>Reality</td>
<td>7.6 (3.0)</td>
<td>7.0 (2.8)</td>
<td>.66</td>
<td>(38)</td>
<td>.5</td>
</tr>
</tbody>
</table>

In response the question whether thinking about the fear image for a long time would be a good thing, a bad thing or a neutral thing, the results were the same for both groups: 5% thought it would be a good thing, 85% thought it would be a bad thing, and 10% thought it would be a neutral thing.
Results

Emotional valence of the image

Two markers rated the emotional valence of the images on a scale from -3 (very fearful, actual catastrophe) to +3 (very positive). The mean emotional valence score of the agoraphobic group was -2.25 (SD= .85) compared to the control mean of -.09 (SD= .91). The emotional valence of the recurrent images of the agoraphobic group was significantly more distressing (t (38)=-4.8, p<.005) than the images generated by the control.

Table 10: Emotional valence of imagery

<table>
<thead>
<tr>
<th>Emotional valence</th>
<th>Agoraphobic group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency (percentage)</td>
<td>Frequency (percentage)</td>
</tr>
<tr>
<td>-3 (very fearful, actual catastrophe)</td>
<td>10 (50%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>-2 (fearful, potential catastrophe)</td>
<td>5 (25%)</td>
<td>4 (20%)</td>
</tr>
<tr>
<td>-1 (Quite fearful, difficult situation)</td>
<td>5 (25%)</td>
<td>7 (35%)</td>
</tr>
<tr>
<td>0 (neither positive or negative)</td>
<td>8 (40%)</td>
<td>8 (40%)</td>
</tr>
</tbody>
</table>

2. Description of associated memories to the agoraphobic images

Link to image

Within the two groups, all the participants (100%) thought there was a particular memory that was closely associated with the fear imagery. All participants were able to report this memory. The age the participant was in the associated memory differed significantly between the groups (t(31.9)=-2.8, p<.05). In the agoraphobic group the mean age in the memory was 14.3 years (SD=13.4), compared to the older mean age of 30.0 (SD=21.5) for the control group. In the agoraphobic group the mean age for the onset of agoraphobia was 34.5 years (SD=11.6 years), with a range of 22-57 years.
Events spoken about in memories

Participants were asked to describe the memory most associated with their imagery. Events recalled in the memories and frequencies of these events are shown in Table 11. Some of the participants in the agoraphobic group spoke about more than one associated memory, so all these are shown.

**Table 11: Events spoken about in associated memories**

<table>
<thead>
<tr>
<th>Event</th>
<th>Agoraphobic group Frequency (%)</th>
<th>Control group Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neglect/ Abuse at home</td>
<td>8 (40)</td>
<td>0</td>
</tr>
<tr>
<td>Fear/ or actual attack</td>
<td>5 (25)</td>
<td>3 (15)</td>
</tr>
<tr>
<td>Panic on public transport</td>
<td>5 (25)</td>
<td>2 (10)</td>
</tr>
<tr>
<td>Stuck in an enclosed place</td>
<td>3 (15)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Near death experience</td>
<td>1 (5)</td>
<td>0</td>
</tr>
<tr>
<td>Being shown up in front of others</td>
<td>1 (5)</td>
<td>4 (20)</td>
</tr>
<tr>
<td>Shopping/ in a crowded place</td>
<td>0</td>
<td>6 (35)</td>
</tr>
<tr>
<td>Being lost as a child</td>
<td>0</td>
<td>3 (15)</td>
</tr>
<tr>
<td>Feeling lonely</td>
<td>0</td>
<td>1 (5)</td>
</tr>
</tbody>
</table>

As can be seen from the frequencies above, 40% of the agoraphobic group spoke about an abusive event at home that they thought was closely associated with their fear imagery. Abusive events included getting physically abused by a parent, being neglected by parents, a parent being drunk and frightening, being locked in bedroom, or mental or physical victimisation by another member of the family. For a summary of the actual transcripts, see Appendix 8.

**Characteristics of recurrent images:**

**Sense modalities utilised**

The sense modalities recalled in the associated memory are shown in Table 12.
Table 12: Percentage of sense modalities reported in the memory

<table>
<thead>
<tr>
<th>Sense modality</th>
<th>Agoraphobic Group</th>
<th>Memory</th>
<th>Control group</th>
<th>Differences between gps.</th>
<th>$\chi^2$ (d.f) p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Sensations</td>
<td>16 (80%)</td>
<td>15 (60%)</td>
<td>15 (60%)</td>
<td>$\chi^2$(1)=3.2, p=.71</td>
<td></td>
</tr>
<tr>
<td>Aural</td>
<td>8 (40%)</td>
<td>15 (60%)</td>
<td>15 (60%)</td>
<td>$\chi^2$(1)=5.0, **</td>
<td></td>
</tr>
<tr>
<td>Touch</td>
<td>2 (10%)</td>
<td>8 (40%)</td>
<td>8 (40%)</td>
<td>$\chi^2$(1)=4.8, **</td>
<td></td>
</tr>
<tr>
<td>Taste/smell</td>
<td>2 (10%)</td>
<td>5 (25%)</td>
<td>5 (25%)</td>
<td>$\chi^2$(1)=1.6, p&lt;.2</td>
<td></td>
</tr>
</tbody>
</table>

**=significant at <.05 level

Again visual representation was the most predominant in both groups, however the control group were significantly more likely to report aural and touch representations in the image.

Perspective of the memory

The perspective taken in the associated memory (plus a reminder of the perspectives taken in the relaxation and fear imagery) of the participants is shown in Table 13. There is not a significant difference between the two groups in respect to the perspective taken in the memory ($\chi^2$(2)=4.8, p=.09). However, there is a significant difference with the agoraphobic group over the three situations (relaxation, fear imagery and associated memory) with the alternating perspective (Cochran’s $Q$(2)=15.2, p=.001) and the internal perspective (Cochran’s $Q$(2)=10.5, p=.005), where the agoraphobic group move from having an internal perspective (that is, viewing our their own eyes) to a fluctuating perspective in the fear imagery (that is, alternating between an internal and external perspective), with a tendency to have an internal or an external perspective in the memory. There were no significant changes for the control group over the three situations.
Results

Table 13: Perspective taken in the associated memory

<table>
<thead>
<tr>
<th>Relaxation</th>
<th>Image</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agora:</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Control:</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

Agora.= people with agoraphobia
Int.= internal perspective (looking out own eyes)
Ext.= external perspective (seeing the self as if an observer)
Alter.= alternating perspective (fluctuating between an internal and external perspective)

Clarity, vividness, and how real the memory seemed

Further characteristics of the memory were asked of the participants such as the clarity, vividness and reality of the memory. These are shown in Table 14.

Table 14: Further characteristics of the memory

<table>
<thead>
<tr>
<th>Memory</th>
<th>Agoraphobic group Mean (SD)</th>
<th>Control Mean (SD)</th>
<th>Difference t(df) p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity</td>
<td>8.6 (1.6)</td>
<td>7.6 (2.3)</td>
<td>1.6 (38) p=.117</td>
</tr>
<tr>
<td>Vividness</td>
<td>8.4 (1.7)</td>
<td>7.1 (2.4)</td>
<td>2.0 (38) p&lt;.05**</td>
</tr>
<tr>
<td>Reality</td>
<td>8.2 (2.1)</td>
<td>7.6 (2.6)</td>
<td>0.8 (38) p=.43</td>
</tr>
</tbody>
</table>

The memory of the agoraphobic group was significantly more vivid than for the control group.

Emotional valence of memory

Two markers rated the emotional valence of the memories, again on a scale running from −3 (very fearful, actual catastrophe) to +3 (very positive). The mean of the emotional valence of the agoraphobic group was −2.4 (SD=.75) compared to the mean of the control group −1.5 (SD=.89). The emotional
valence of the agoraphobic memories was significantly more distressing (t(38) = -3.45, p < .005) than the control group.

<table>
<thead>
<tr>
<th>Emotional valence</th>
<th>Agoraphobic group Frequency (percentage)</th>
<th>Control group Frequency (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3 (very fearful, actual catastrophe)</td>
<td>11 (55%)</td>
<td>4 (20%)</td>
</tr>
<tr>
<td>-2 (fearful, potential catastrophe)</td>
<td>6 (30%)</td>
<td>3 (15%)</td>
</tr>
<tr>
<td>-1 (Quite fearful, difficult situation)</td>
<td>3 (15%)</td>
<td>12 (60%)</td>
</tr>
<tr>
<td>0 (neither positive or negative)</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
</tr>
</tbody>
</table>

3. Themes of imagery and linked memories

Below are the themes, definitions and examples that emerged from the transcripts of the image and associated memories using a content analysis approach (Smith, 2000). After each example of the theme illustrated from the data, the number of the participant that the extract came from will follow in brackets (a number 1a-20a is a participant with agoraphobia, numbers 201c-220c are control participants). The actual transcripts that the themes emerged from are presented in the Appendix 8. The themes have been split into six main sections: situation of impending doom, panic and dissociation, emotions (both primary and complex), underestimating lack of resources to cope with situation, plan to deal with the situation, and meaning of the situation. These main headings have been subdivided into themes that are related to the main overarching themes (see Figure 7, pg. 94). This figure shows that the images and associated memories contain many emotions, cognitions, behaviours, and meanings for the individual, more than just fear.
Figure 7: Themes in the transcripts

Situation of impending doom
- Anticipation of or actual mental catastrophe
  - Anticipation of or actual physical catastrophe

Panic and Dissociation
- Amplification/distortion of senses
  - Physical panic symptoms
  - Disorientation
  - Frozen

Emotions
- Primary
  - Fear
  - Anger
  - Depression

Complex
- Overwhelmed
- Entrapment
- Social humiliation
- Intimidation
- Loneliness

Lack of resources to cope
- Inability to protect self
  - Lack of protection by others including use of alcohol

Plan to deal with situation
- Needing to escape
- Wanting to hide
- Wanting to return home
- Wanting to disappear

Meaning of situation
- Negative view of self
- Negative view of others
- Negative view of world
- Polarised thinking
Description of the themes in the image and memory

1. *Situation of impending doom*

The themes in this section refer to the anticipation or actual occurring of a mental or physical catastrophe.

- **Anticipation of, or actual mental catastrophe**

This theme relates to the anticipation or actual feeling of losing control, either physically or mentally or being mad or “crazy”. This could be in terms of losing control due to panic or anger. Examples within the transcripts include, “feeling out of control” (no. 4a), “losing control” (nos. 2a, 218c), “not control self” (no. 6a), “having no control” (no. 13a) and “being out of control” (no. 20a).

- **Anticipation of, or actual physical catastrophe**

This theme relates to the anticipation or actual occurrence of a physical catastrophe, where the perceived consequence is actual harm or death. Examples include “Crossing road, pass out in the middle” (no: 3a), “hit my head on the door knob, knocked out” (no: 2a), “I have stopped breathing” (no: 3a) and “I pass out and not wake up” (no: 12a). Most of the situations relate to a situation where the participants is stuck somewhere, either in public transport, in a supermarket, by people not letting them escape or by illness. Table 16 shows the physical catastrophes present in the imagery and memories of the agoraphobic group.
Table 16: Physical catastrophes cited by agoraphobic group

<table>
<thead>
<tr>
<th>Agoraphobic group Physical catastrophes</th>
<th>Imagery Frequencies (%)</th>
<th>Memories Frequencies (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting stuck somewhere: no escape</td>
<td>14 (70)</td>
<td>15 (75)</td>
</tr>
<tr>
<td>Passing out/ collapsing/ drowning</td>
<td>2 (10)</td>
<td>2 (10)</td>
</tr>
<tr>
<td>Physical attack</td>
<td>2 (10)</td>
<td>2 (10)</td>
</tr>
<tr>
<td>Getting run over</td>
<td>1 (5)</td>
<td></td>
</tr>
<tr>
<td>Not being able to protect children</td>
<td>1 (5)</td>
<td></td>
</tr>
</tbody>
</table>

2. Panic and dissociation

The second main grouping theme has been named “panic and dissociation”.

Categories within this main theme include the effect of anxiety and panic.

Amplification/ distortion of senses

This theme relates to people feeling as if their senses are being amplified, such as noises seeming to be louder, or senses being distorted, such as not being able to make things out clearly. Examples of amplification include, “lots of noise” (no. 1a), “all things are in extreme” (no. 3a) and “talking loudly” (no. 3a). Examples of distortion include “blurred faces” (no. 9a), “just a buzz” (no. 7a), “just see faces” (no. 2a) and “can see myself and other people from lots of different angles” (no. 6a).

Disorientation/ unreality/changes to sense of time

This theme relates to the person experiencing a sense of confusion, disorientation or unreality due to the experience. Examples relate to the person not being sure what is going on, such as, “didn’t know what was happening”
Results

(no. 19a), “disorientated” (no. 7a), “confused whether real or not” (no. 3a) and “losing sense of direction” (no.8a).

Some participants spoke about a change in time in terms of a speeding up, slowing down or a general awareness of time. Examples include “seemed like hours” (no. 13a), “takes seconds” (no. 1a) and “felt really afraid for half an hour” (no. 5a).

Physical panic symptoms

This theme relates to physical sensations of panic that are experienced by the person. Examples from the people with agoraphobia include, “couldn’t breathe” (no. 1a), “heart pounding” (no. 10a), “all kinds of alarming sensations coming” (no. 7a), “feeling really hot” (no. 19a) and “look completely white” (no. 19a).

Compared to the agoraphobic group, the control group spoke about milder symptoms of anxiety, rather than panic, for example “anxious” (nos.201c, 206c, 207c, 210c, 213c, 214c, 2a, 3a, 9a, 11, 14, 16a, 19a, 20a), “sweating” (nos. 202c, 1a, 9a, 11a), “heart beating fast” (nos. 203c, 16a) and “blushing” (no. 204c).

Immobility/ frozen

This theme refers to the feeling of not being able to move, like being frozen to the spot. This could either be the person, or things that are happening around the person. Examples of this in the transcripts include, “couldn’t move” (no. 1a), “unable to move” (no. 4a), “stranded in a supermarket” (no. 4a), “have to be on
the floor and wait till someone gets me up” (no. 15a) and “not moving like stuck monsters” (no. 4a).

3. **Emotions**

Using Ekman’s (1999) distinction between primary and secondary emotions, where primary emotions are viewed as a direct response to overwhelming circumstances, and secondary emotions arise from more elaborate appraisals made after the event, this section has been split these two categories. The primary emotions (Ekman, 1999) include emotions such as fear, anger, and depression, and the secondary emotions include loneliness, being overwhelmed, trapped, shame and social humiliation, being misunderstood and intimidation.

**Primary emotions**

- **Fear emotions**

Fear emotions relate to the feelings of terror and fright that accompany the perception of threat. Examples of this include, “frightened” (nos. 201c, 217c, 218c), “scared” (nos. 5a, 6a, 8a, 9a, 13a, 14a, 18a, 201c, 203c, 212c, 217c), “so distressed” (no. 11a), absolutely terrified” (no. 17a), “inner dread” (no. 20a) and “this is not panic but terror” (no. 7a).

- **Anger and frustration**

Participants spoke about anger or feelings to express anger to describe how they felt in their images and their related memories. Examples of these feelings include, “feeling cross” (no. 209c), “being irritated” (no. 219c, 208c) and “angry” (nos. 2a, 6a, 7a, 15a, 16a).
**Depression cognitions: resignation, sadness, hopelessness**

This theme relates to depression cognitions spoken about by the participants in terms of their imagery and related memories. Examples of these cognitions include “resignation” (no. 4a), “hopeless” (nos. 1a, 7a, 13a, 14a) and “sadness” (nos. 4a, 218c).

**Complex emotions**

**Loneliness**

Participants spoke about a sense of being alone and isolated. This includes being forced to be alone, or being unwanted. Extracts from this theme include, “no one to tell, no one to listen” (no. 4a), “living in a family that mostly ignored…… me” (no. 7a), “being on my own” (no. 12a), “I am alone” (no. 12a), “sitting there aged five, alone” (no. 13a), “separate. I am on my own” (no. 17a) and “my mother did not love me” (no. 17a).

**Overwhelmed**

This theme refers to a feeling of being overwhelmed, physically or emotionally. The definition includes being overpowered, being surrounded, or a sense of things looming in. Examples of being overwhelmed includes “people over me” (no. 3a), “Everything crowding in on me” (no. 1a), “carriages closing in around” (no. 5a), “as go further into the shop, everything closes in” (no. 12a), “other cars surrounding the car I am in” (no. 20a) and “overpowered” (nos. 3a, 7a).
Results

Entrapment
This specifically refers to the feeling of being trapped in a situation, not being able to get away. Examples include, “I couldn’t climb out” (no. 5a), “I am stuck in the middle” (no. 6a), “I am trapped” (nos. 7a, 17a), “people are not letting me escape” (no. 6a), “can’t get out” (nos. 11a, 215c), “banging at the door, wanting to get out” (no. 13a) and “door shuts, oh my god, I am trapped” (no. 17a).

Shame and social humiliation
This theme refers to the situation of being humiliated, embarrassed or shown up in front of other people. This includes the worry and fear of being the cause of negative attention. Examples of this theme included, “tail between my legs” (no. 3a), “making a fool of self” (no. 3a), “I look ridiculous, I am embarrassing” (no. 8a), “I have been made to look a fool” (no. 15a), “humiliated. Don’t want to show myself up” (no. 16a), “judging me. Laughing at me” (no. 17a), “feeling so uncomfortable in front of other people” (no. 9a) and “will I panic and look silly?” (no. 8a).

Being misunderstood
This theme relates to people not understanding what is happening, and the person not feeling understood. Examples of this theme include, “some people are scared of me, don’t understand what is happening” (no. 16a), “people thinking I am mad. They do not understand what it is like” (no. 18a) and “anger at people who do not understand” (no. 16a).
Results

Intimidation/ lack of assertiveness

Some participants spoke about feeling weak, or wanting to do things but not being able to. This theme has been termed feeling intimidation or lacking in assertiveness. Examples of this theme include “couldn’t say nothing to no one, seen as weakness” (no. 5a), “I should have hit harder” (no. 6a), “I was stifled” (no. 16a), “when I was young, not allowed to say things” (no. 16a) and “couldn’t look round at other people” (no. 1a).

4. Underestimating/ lack of resources to cope in situation

This section of themes relate to the participants feeling as if they have a lack of resources to cope.

Lack/ inability to protect self

This theme relates to an inability of a person to protect themselves. Examples include, “weak” (nos. 2a, 3a, 4a, 7a, 8a, 14a, 18a, 20a), “powerless” (nos. 4a, 7a), “vulnerable” (nos. 3a, 207c), “how am I going to cope with everything” (no. 15a), “there to be abused” (no. 17a) and “helpless” (nos. 4a, 7a, 14a, 205c).

Others not being protecting/ help not available

This theme relates to a lack of protection from those around the person who needs protecting, from example from carers. Examples of this include, “as a child, had to look after self” (no. 4a), “I was brought up by an abusive mother” (no. 17a), “Mum running out the house, leaving us there” (no. 2a), “no one there
for me” (no. 4a), “parents did not realise seriousness of situation” (no. 4a) and “no one to help” (no. 4a). Also included in this theme is the use of alcohol by other people in a negative way. Examples include, “dad came in drunk, being drinking all night” (no. 2a), “my father used to come in drunk” (no. 8a), “mum and dad used to go out to the pub” (no. 12a) and “my father was an alcoholic” (no. 17a).

5. **Plan to deal with the situation**

These themes relate to how people try and deal with the negative situation.

- **Needing to escape**

This theme relates to the general sense of needing to escape from the situation. Examples in the transcripts include, “need to escape” (Nos. 1a, 13a, 17a), “get away” (Nos. 1a, 2a, 7a, 8a, 9a, 13a, 14a, 18a, 214c), “need to get out” (Nos. 208c, 213c, 218c), “wanted out” (No. 1a), “cannot get out” (Nos. 12a, 220c), “want to run” (Nos. 1a, 16a), “let me out” (Nos. 20a, 217c) and “people are not letting me escape” (No. 6a).

- **Wanting to hide**

This theme relates to wanting to hide the symptoms of anxiety. Examples within the transcripts include, “trying not to let other people see” (no: 11a), and “trying to hide” (no: 2a).
Results

Wanting to return home

This theme relates to the desire to find be at home, or a safe place. Examples include, “wanting to get home” (no: 8a), “trying to get home” (no: 13a), “want people to disappear so can crawl home” (no: 3a), “needed to be at home alone” (no: 8a) and “get out, back to somewhere where can shut self in” (no: 18a).

Wanting to disappear

“Wanting to disappear” refers to the desire to become invisible. Examples in the transcripts include, “want to jump out of body” (no: 18a), “try and hide self’ (no: 8a), and “yes, must find a ditch to die” (no: 7a).

6. Meaning of situation

This section of themes refers to the meaning the participants give to the situation.

Negative view of self

This theme represents low self-esteem and a negative view of self. Examples of this theme include, “unlovable” (no. 16a), “not good enough” (no. 13a), “am nothing” (no.17a), “useless, weak and valueless” (no. 7a) and “pathetic, coward” (no. 5a).

Negative view of other people

This theme refers to having a negative view of other people. This theme includes other people being, “dangerous” (no. 7a), “some are ignorant” (no. 6a),
“nasty, moody” (no. 11a), “don’t want to know” (no. 16a) and “not in a hurry to help” (no. 11a).

- **Negative view of the world**

This theme represents participants having a negative view of the world. Examples of this theme include, the world being “full of obstacles” (no. 11a), “horrible place to be” (no. 2a), “pretty shitty” (no. 5a), “dangerous” (nos. 7a, 10a), “hateful. I don’t want to be here” (no. 13a) and “hate it. Feel so sorry for younger generation” (no. 18a).

- **Thinking in extremes about people and the world**

Some participants spoke about having two extremes in thinking, which seemed to represent a polarised way of thinking about things. Examples of this include, things being “good and bad, summer and winter, negative and positive” (no. 17a) and the “world is good and bad” (no. 11a).
Results

Inter-rater reliability

Table 17 shows the inter rater reliability of coding the themes between the two markers. Cohen's Kappa (Cohen, 1960) was used to calculate the reliability.

The scoring sheet is presented in the Appendix 7.

Table 17: Inter rater reliability of the themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>% agreement</th>
<th>Cohen’s Kappa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental catastrophe</td>
<td>98</td>
<td>.79</td>
</tr>
<tr>
<td>Physical catastrophe</td>
<td>98</td>
<td>.95</td>
</tr>
<tr>
<td>Amplification of senses</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Disorientation</td>
<td>98</td>
<td>.93</td>
</tr>
<tr>
<td>Physical panic symptoms</td>
<td>96</td>
<td>.92</td>
</tr>
<tr>
<td>Immobility/ frozen</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Fear emotions</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Anger</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Depression cognitions</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Loneliness</td>
<td>98</td>
<td>.92</td>
</tr>
<tr>
<td>Overwhelmed</td>
<td>99</td>
<td>.95</td>
</tr>
<tr>
<td>Intimidation</td>
<td>95</td>
<td>.89</td>
</tr>
<tr>
<td>Social humiliation</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Being misunderstood</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Lack/ inability to protect self</td>
<td>99</td>
<td>.99</td>
</tr>
<tr>
<td>Lack of protection by others</td>
<td>96</td>
<td>.92</td>
</tr>
<tr>
<td>Use of alcohol</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Needing to escape/ trapped</td>
<td>96</td>
<td>.95</td>
</tr>
<tr>
<td>Negative view of self</td>
<td>96</td>
<td>.92</td>
</tr>
<tr>
<td>Negative view of others</td>
<td>95</td>
<td>.89</td>
</tr>
<tr>
<td>Negative view of world</td>
<td>99</td>
<td>.97</td>
</tr>
<tr>
<td>Thinking in extremes</td>
<td>100</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Four further themes were added to subdivide the “needing to escape” category.

These were: wanting to hide symptom, wanting to return home, entrapment, and wanting to disappear. All these new themes were coded by two raters, with a Cohen’s Kappa (1960) statistic of .99.
Results

Frequency of themes

The number of transcripts that the themes emerged in, and the percentage that this number is of the group is shown in Table 18. Significant differences between the numbers of people in the agoraphobic group that elicited the theme compared to the control group are shown by an asterisk (*). The key to the table is at the bottom.
Table 18: Frequency count of the themes in the data

<table>
<thead>
<tr>
<th>Themes in agoraphobic transcripts compared to controls</th>
<th>IMAGERY</th>
<th>MEMORY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. present in imagery</td>
<td>No. present in memory</td>
</tr>
<tr>
<td></td>
<td>of agoraphobics Vs imagery of control</td>
<td>Vs memory of agoraphobics</td>
</tr>
<tr>
<td>Mental catastrophe</td>
<td>7**</td>
<td>6</td>
</tr>
<tr>
<td>Physical catastrophe</td>
<td>20****</td>
<td>19****</td>
</tr>
<tr>
<td>Amplification/senses</td>
<td>10**</td>
<td>3</td>
</tr>
<tr>
<td>Disorientation</td>
<td>8***</td>
<td>4</td>
</tr>
<tr>
<td>Panic symptoms</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Immobility/ frozen</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fear emotions</td>
<td>16***</td>
<td>15*</td>
</tr>
<tr>
<td>Anger</td>
<td>4</td>
<td>5*</td>
</tr>
<tr>
<td>Depression cognitions</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Loneliness</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Overwhelmed</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Social humiliation</td>
<td>12****</td>
<td>8</td>
</tr>
<tr>
<td>Being misunderstood</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Intimidation</td>
<td>7****</td>
<td>5</td>
</tr>
<tr>
<td>Inability to protect self</td>
<td>6</td>
<td>5*</td>
</tr>
<tr>
<td>Lack of protection</td>
<td>10***</td>
<td>13***</td>
</tr>
<tr>
<td>Use of alcohol</td>
<td>0</td>
<td>6***</td>
</tr>
<tr>
<td>Needing to escape</td>
<td>17</td>
<td>15**</td>
</tr>
<tr>
<td>Negative view/ self</td>
<td>13****</td>
<td>11****</td>
</tr>
<tr>
<td>Negative view/ others</td>
<td>12***</td>
<td>9</td>
</tr>
<tr>
<td>Negative view/ world</td>
<td>13****</td>
<td>6</td>
</tr>
<tr>
<td>Thinking in extremes</td>
<td>3*</td>
<td>4**</td>
</tr>
</tbody>
</table>

****p<.001; ***p<.01; **p<.05; *p<.1 (trend)

The "needing to escape" category was subdivided into the following four categories shown in the table below to make the theme more specific. The total numbers are not the same as in the "needing to escape" category as some participants elicited more than one of the additional four themes in their transcripts.
Results

<table>
<thead>
<tr>
<th>Themes in agoraphobic transcripts compared to controls</th>
<th>IMAGERY</th>
<th>MEMORY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. present in imagery of agoraphobics</td>
<td>No. present in imagery of control</td>
</tr>
<tr>
<td>Wanting to hide</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wanting to disappear</td>
<td>8***</td>
<td>1</td>
</tr>
<tr>
<td>Wanting to return home</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Entrapment</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

****p<.001; ***p<.01; **p<.05; *p<.1 (trend)

It can be seen that within the fear imagery, the agoraphobic group were significantly more likely to talk about the anticipation or the actual occurrence of a mental or physical catastrophe. The agoraphobic group were also more likely to have amplified or distorted senses, and feel disorientated, like experiencing changes in time. Further significant themes that were highlighted in the agoraphobic group in the image were fear cognitions, being shamed and socially humiliated, feeling intimidated, and a lack of protection by others. The agoraphobic group were more likely to want to “disappear” to deal with the situation. The imagery of the agoraphobic group was also significantly different to the control in terms of the negative meaning given to the self, others and the world, and the use of polarised thinking.

With reference to the themes in the memories, the agoraphobic group recalled significantly more anticipated or actual physical catastrophes. The memories included significantly more themes of being fearful and angry. Also, not being able to protect the self, a lack of protection by others, feeling trapped and
Results

needing to escape from a situation. The agoraphobic group, in the memories, took a significantly more negative view of the self, engaged in more polarised thinking, and recalled the use of alcohol by others.

**Similarity of the imagery and the memory**

Participants were asked how similar they thought the fear image and the associated memory were in terms of general similarity, and more specifically in terms of sensory aspects, physical sensations, emotions felt and relationship to people. The answer was given on a 0-10 point scale, with 0 as not similar at all, and 10 being the most similar they could be. There were no significant differences between the agoraphobic group and the control group.

**Table 19: Similarity between fear imagery and associated memory**

<table>
<thead>
<tr>
<th>Similarity</th>
<th>Agoraphobic group Mean (SD)</th>
<th>Control Mean (SD)</th>
<th>Difference t (df) p</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>7.1 (3.3)</td>
<td>7.1 (2.1)</td>
<td>.00 (31.9) p=1.0</td>
</tr>
<tr>
<td>Sensory</td>
<td>5.4 (3.7)</td>
<td>6.9 (2.3)</td>
<td>-1.5 (31.6) p=0.1</td>
</tr>
<tr>
<td>Physical sensations</td>
<td>6.5 (3.4)</td>
<td>7.3 (2.3)</td>
<td>-.87 (33.0) p=0.39</td>
</tr>
<tr>
<td>Emotions</td>
<td>5.8 (3.9)</td>
<td>7.1 (2.5)</td>
<td>-1.3 (32) p=0.2</td>
</tr>
<tr>
<td>Relationship to people</td>
<td>6.4 (3.6)</td>
<td>7.3 (2.4)</td>
<td>-.9 (33) p=0.39</td>
</tr>
</tbody>
</table>

Table 20 shows the similarity between the themes in the image and in the memory within the people with agoraphobia and the control, using chi square statistics to show statistical significance. Again, the number of people that the theme emerged in their transcript is shown.
### Table 20: Similarity between themes in the image and the memory

<table>
<thead>
<tr>
<th>Theme in the image and the memory</th>
<th>Agoraphobic group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency in the image</td>
<td>Frequency in the memory</td>
</tr>
<tr>
<td>Mental catastrophe</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Physical catastrophe</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>Amplification of senses</td>
<td>10</td>
<td>3 *</td>
</tr>
<tr>
<td>Disorientation</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Panic symptoms</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Immobility</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fear emotions</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Anger</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Depression Cognitions</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Loneliness</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Overwhelmed</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Social Humiliation</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Being misunderstood</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Intimidation</td>
<td>7</td>
<td>5 ***</td>
</tr>
<tr>
<td>Inability to protect self</td>
<td>6</td>
<td>5 **</td>
</tr>
<tr>
<td>Lack of protection</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Use of alcohol</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Needing to escape</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Negative view of self</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Negative view of others</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Negative view of world</td>
<td>13</td>
<td>6 **</td>
</tr>
<tr>
<td>Thinking in extremes</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Wanting to hide</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Wanting to disappear</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Wanting to return home</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Entrapment</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

**Note:**

***p<.001; **p<.01; *p<.05

As can be seen from Table 20, the themes that emerged in the transcripts of the images in agoraphobic group were similar to the themes that emerged in the memory. There were four themes that were significantly different in the image than the memory within the agoraphobic. The agoraphobic group were significantly less likely to recall in an associated memory, amplification of senses, intimidation, inability to protect themselves and a negative view of the world, compared to in the image. However, all the other themes were no
different for the agoraphobic group in the image compared to the associated memory. More themes changed from the image to the memory for the control group.

The control group were significantly more likely to recall in the associated memory more negative experiences, such as wanting to disappear, a more negative view of the world, more social humiliation, more loneliness, more physical catastrophes, and a lack of protection. However, in the memory, the control group had a less negative view of self, and less wanting to return home than in the image.

Therefore, in summary, it seems that for the control group the memory was more negative than the image, whereas for the agoraphobic group, the memory was slightly more positive in terms of their view of the world, protecting themselves and panic sensations.

4. Relationship between image and onset of agoraphobia

Effect of memory

There was not a significant difference between the groups on how many people had thought about the similarity of the image and the associated memory before the interview ($\chi^2(1)=1.1, p=0.3$). 15% (3) of the agoraphobic group had thought about this past memory before, whereas 5% (1) of the control had. The participants were asked whether they were anxious in situations before the time of the memory, 75% of the agoraphobic sample said that they were not, and
Results

65% of the control said that they were not anxious before the memory. When asked if the participants thought the memory changed their anxiety in agoraphobic situations, there was a significant difference between the groups ($\chi^2(2)=10.0, p<.05$) with 75% of the agoraphobic sample reporting that the memory had affected their anxiety levels in agoraphobic situations, compared to 30% of the control.

Qualitative data about the importance of the memory

After the interview, many of the participants in the agoraphobic group spoke about how they were struck that they had not thought about the memory before the interview, and felt it was a significant factor in their fears. Examples include “I think this was where my fear began. I will talk about it with my therapist” (No. 11a), “Do you think this is where my fear started?” (Nos. 3a, 5a), “I had forgotten about that memory, do you think it is important?” (No. 12a), “No wonder I am scared like this” (No. 16a).

5. Follow up data

Follow up data from the symptom questionnaires was gained a week after the interview from 13 (65%) of the agoraphobic group and 11 (55%) of the control group. Table 21 shows the scores on the questionnaires of the participants where two sets of data was gained.
Results

Table 21: Difference in scores on questionnaires between time one and time two

<table>
<thead>
<tr>
<th>Questionnaires:</th>
<th>Time 1 Mean (SD)</th>
<th>Time 2 Mean (SD)</th>
<th>F, p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agoraphobic n=13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control n=11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACQ- Total: Agoraphobic</td>
<td>31.8 (7.0)</td>
<td>36.0 (11)</td>
<td>1.5 .23</td>
</tr>
<tr>
<td>ACQ- Total: Control</td>
<td>18.0 (5.4)</td>
<td>18.0 (3)</td>
<td>.003 .955</td>
</tr>
<tr>
<td>Physical concerns: Agoraphobic</td>
<td>14.5 (5.3)</td>
<td>15.2 (5.7)</td>
<td>.203 .657</td>
</tr>
<tr>
<td>Physical concerns: Control</td>
<td>8.0 (1.5)</td>
<td>8.0 (1.2)</td>
<td></td>
</tr>
<tr>
<td>Social Concerns: Agoraphobic</td>
<td>17.2 (7.1)</td>
<td>20.8 (7.7)</td>
<td>1.932 .178</td>
</tr>
<tr>
<td>Social Concerns: Control</td>
<td>10.0 (4)</td>
<td>10.0 (2.4)</td>
<td></td>
</tr>
<tr>
<td>BAI- Total: Agoraphobic</td>
<td>30.8 (9.8)</td>
<td>30.3 (12)</td>
<td>.003 .955</td>
</tr>
<tr>
<td>BAI- Total: Control</td>
<td>4.9 (3.4)</td>
<td>4.6 (3.8)</td>
<td>.003 .955</td>
</tr>
<tr>
<td>BDI- Total: Agoraphobic</td>
<td>21.7 (9.4)</td>
<td>23.9 (9.8)</td>
<td>3.6 .07</td>
</tr>
<tr>
<td>BDI- Total: Control</td>
<td>7.0 (6.1)</td>
<td>5.4 (4.8)</td>
<td>.072 .412</td>
</tr>
<tr>
<td>BSQ-Total: Agoraphobic</td>
<td>41.9 (16.2)</td>
<td>40.9 (13)</td>
<td>.013 .911</td>
</tr>
<tr>
<td>BSQ-Total: Control</td>
<td>22.4 (5.3)</td>
<td>21.8 (6.0)</td>
<td>.013 .911</td>
</tr>
<tr>
<td>Fear Questionnaire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agoraphobic avoidance: Agor.</td>
<td>33.0 (5.1)</td>
<td>26.7 (11)</td>
<td>10.67 .004***</td>
</tr>
<tr>
<td>Agoraphobic avoidance: Control</td>
<td>1.2 (1.8)</td>
<td>2.6 (2.9)</td>
<td></td>
</tr>
<tr>
<td>Blood Injury avoidance: Agor.</td>
<td>16.8 (9.6)</td>
<td>15.8 (12)</td>
<td>.102 .752</td>
</tr>
<tr>
<td>Blood Injury avoidance: Control</td>
<td>7.0 (5.6)</td>
<td>5.1 (3.9)</td>
<td></td>
</tr>
<tr>
<td>Social avoidance: Agoraphobic</td>
<td>21.0 (9.1)</td>
<td>20.0 (9.6)</td>
<td>.01 .922</td>
</tr>
<tr>
<td>Social avoidance: Control</td>
<td>7.9 (4.4)</td>
<td>7.2 (4.9)</td>
<td>.01 .922</td>
</tr>
<tr>
<td>How troubled: Agoraphobic</td>
<td>24.4 (8.8)</td>
<td>24.9 (6.8)</td>
<td>.02 .89</td>
</tr>
<tr>
<td>How troubled: Control</td>
<td>7.5 (4.3)</td>
<td>6.6 (4.7)</td>
<td></td>
</tr>
<tr>
<td>Present state of symptoms: Agor.</td>
<td>6.0 (1.2)</td>
<td>5.8 (1.2)</td>
<td>.532 .47</td>
</tr>
<tr>
<td>Present state of symptoms: Control</td>
<td>.73 (.9)</td>
<td>.91 (.94)</td>
<td>.532 .47</td>
</tr>
<tr>
<td>MIA- Avoidance when accomp.:Ag</td>
<td>93.1 (15.8)</td>
<td>82.5 (24)</td>
<td>4.6 .044**</td>
</tr>
<tr>
<td>MIA- Avoidance when accomp.:Con.</td>
<td>25.8 (8.8)</td>
<td>28.0 (5.5)</td>
<td></td>
</tr>
<tr>
<td>Avoidance when alone: Agoraphobic</td>
<td>110.2 (15)</td>
<td>107.4 (24)</td>
<td>.593 .449</td>
</tr>
<tr>
<td>Avoidance when alone: Control</td>
<td>27.9 (10.1)</td>
<td>30.7 (8.4)</td>
<td>.593 .449</td>
</tr>
<tr>
<td>No. of panic attacks: Agoraphobic</td>
<td>1.4 (2.0)</td>
<td>3.4 (4.3)</td>
<td>1.79 .194</td>
</tr>
<tr>
<td>No. of panic attacks: Control</td>
<td>.09 (.3)</td>
<td>.27 (.47)</td>
<td>.532 .47</td>
</tr>
</tbody>
</table>

ACQ= Agoraphobic Cognitions Questionnaire; BAI= Beck Anxiety Inventory; BDI= Beck Depression Inventory; BSQ= Body Sensations Questionnaire; FQ= Fear Questionnaire; MIA= Mobility Inventory for Agoraphobia.

***p<.01; **p<.05

As can be seen from Table 21 there were significant interactions between time and group in the measures of agoraphobic avoidance from the Fear Questionnaire, and on avoidance when accompanied from the Mobility Inventory for Agoraphobia. Repeated measures t-tests on these variables
showed that there was a significant decrease between time one and two for the agoraphobic group on the agoraphobic avoidance as measured by the Fear Questionnaire ($t(12)=2.98$, $p=.011$). There was also a trend decrease on avoidance when accompanied for the agoraphobic group between time one and two as measured by the Mobility Inventory for Agoraphobia ($t(12)=2.1$, $p=.058$).

There were no significant differences in the scores on any of the questionnaire measures between the people with agoraphobia who sent back their questionnaires one week later, and those who did not respond. There were also no differences in the scores of the control group between responders and non-responders.
CHAPTER 4: DISCUSSION

This chapter will begin by summarising the main research findings, followed by a discussion of how they relate to the previous literature. The limitations of the research will then be discussed. The chapter will end with a discussion of the implications of the research in terms of theory and clinical work, and ideas that came out of this thesis in terms of future areas of exploration.

Summary of main findings

The main research findings will be presented in the same numbered order as the original research questions. These are summarised here for clarity.

Table 3: Main aims summarised

<table>
<thead>
<tr>
<th>Aims of this thesis</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To explore whether people with agoraphobia have recurrent imagery. If so, find out qualities and characteristics of the imagery and compare to a normal control.</td>
<td>Quantitative</td>
</tr>
<tr>
<td>2. To explore whether the sample have memories linked to their images. If so, find out qualities and characteristics (including emotional valence) of these memories and compare to a normal control.</td>
<td>Quantitative</td>
</tr>
<tr>
<td>3. To explore the themes emerging from the transcripts from both groups in the imagery described and the content of the associated memory. Compare the themes from the two groups.</td>
<td>Qualitative and quantitative</td>
</tr>
<tr>
<td>4. To explore whether there is a link between the associated memory described and the onset of the disorder.</td>
<td>Quantitative</td>
</tr>
<tr>
<td>5. To monitor if there is a possible beneficial impact of the interview by administering follow-up questionnaires one week after the interview and compare to a normal control.</td>
<td>Quantitative</td>
</tr>
</tbody>
</table>
1. **Description of the images people with agoraphobia have about agoraphobic situations**

As shown in the results chapter, of enormous interest to the thesis hypotheses, was that all the participants with agoraphobia had recurrent images when thinking about agoraphobic situations. For 80% of these participants, the imagery took place in a public place, such as in the street, on public transport, or in a shop. The imagery of all the agoraphobic participants had a visual component, and a representation of physical sensations in their bodies. Although other modalities were represented, such as sound, taste, smell and touch, these were less common. In the control group, there were significantly more aural and taste and smell representations in the fear imagery than the agoraphobic group. The perspective that the agoraphobic participants took in their imagery changed over the two imagery situations, i.e. the relaxation scene and the fear scene. In the relaxation scene, an internal perspective was taken by the majority of the agoraphobic group that changed to a perspective of a fluctuating internal and external perspective in the fear imagery. There were no differences between the two groups in terms of clarity, vividness and how real the image seemed. The emotional valence of the fear imagery compared across the two groups showed that the imagery of the agoraphobic group was significantly more negative and catastrophic, as rated by two markers.

2. **Description of associated memories to the agoraphobic images**

Strikingly, all the participants were able to recall an associated memory to their image. The memory recalled by the agoraphobic participants occurred at a significantly younger age than those of the control. Again within the
agoraphobic group, visual and physical sensations representations were the most common within the memory, although sound, taste, smell and touch were also represented within the group. However, again the control group used significantly more aural and touch representations. There were no significant differences between the two groups on the perspective that was taken in the memory. Although there were no significant differences between the groups on how clear and real the memory seemed, the agoraphobic group found the memory significantly more vivid than the control group. The rating of the emotional valence of the memory showed that the memory recalled by the agoraphobic group was significantly more negative and catastrophic. However, 95% of the control group also spoke about negative associated memories.

3. Description of recurrent themes in their imagery and associated memories

The themes that emerged from the transcripts of the agoraphobic sample could be split into six main sections: mental and physical catastrophe, panic and dissociation, emotions (both primary and complex), underestimating resources to cope, plan to escape and the meaning of the situation. These themes were present both in the fear imagery and the associated memories. There was a significant difference in the frequency certain themes emerged from the transcripts of the agoraphobic group compared to the control. Figures 8 (pg. 119) and 9 (pg. 120) show the themes that emerged from the agoraphobic transcripts that were significantly different in terms of frequency from the control, in the imagery and associated memories. In summary, the significant themes in the agoraphobic imagery were a situation of impending doom, namely
Discussion

a mental or catastrophic catastrophe, an interrelated theme of panic and
dissociation with emotions such as fear, social humiliation and intimidation.
The agoraphobic group had a desire to disappear from the situation. The
situation was such that no one around would help or protect the individual, and
the meaning of the situation was negative about the self, others and the world.
There was also a tendency to polarise the thinking into extremes.

Similarly, the memories of the people with agoraphobia contained themes of an
anticipated or actual physical catastrophe, where the emotions were fear and
anger. The agoraphobic memories contained a desire to escape, and a feeling of
being trapped. There was the theme of an inability to being able to protect the
self, and not feeling protected by others. The meaning of the memory was
negative in terms of the self, and a tendency to polarise their thinking into
extremes. The main differences in the people with agoraphobia between the
image and the associated memory were more panic sensations and more
negative thinking about others and the world in the image, and in the memory of
not being able to protect the self.
Discussion

Figure 8: Themes emerging from the imagery of people with agoraphobia

Situation of impending doom
Mental or physical catastrophe e.g. being run over, being stranded in a supermarket, people not letting them pass, being stuck on public transport or in a lift, collapsing, being attacked.

Panic and dissociation
Senses being amplified or distorted, having an alternating perspective of an internal and external view of themselves, disorientation including experiencing changes in time and panic symptoms.

Emotions in situation
Experiencing fear and terror. Feeling socially humiliated and intimidated.

Wanting to disappear.

Resources to cope
Thinking no one will help or protect.

Meaning of the situation
Feeling negative about themselves about the situation, negative about other people, and negative about the world in general. Thinking in extremes about self, others and the world.
Figure 9: Interconnecting themes that emerged from the associated memories of the agoraphobic group

**Situation of impending doom**

Anticipation or actual occurrence of a physical catastrophe happening at a young age such as being abused by parents, drowning, danger on a plane, being neglected, being attacked, and being stuck on public transport.

**Emotions**

Feeling fearful and angry.

Wanting to escape, and feeling trapped in the situation.

**Resources to cope**

Feeling an inability to protect self and a lack of protection by people around in the situation. The negative use of alcohol by people around.

**Meaning of the situation**

Feeling negative about themselves and a polarisation of their thinking about people and the world in general.
These models will be discussed in further detail later in the discussion.

There was no difference between the two groups in how similar they thought the image and the memory were. Both groups responded that in general similarity, the image and the memory had a mean of 7.1, on a scale from 0 (not similar at all) to 10 (extremely similar).

4. **Relationship between the memory linked to the agoraphobic situation and the onset of agoraphobia**

Strikingly, within the agoraphobic sample, 75% reported that the memory reported changed their anxiety in agoraphobic situations. However, surprisingly, only 15% of the agoraphobic group had thought about the similarity of the memory and the contents of the imagery before the interview. Many of the agoraphobic participants made qualitative comments after the interview about how significant they thought the memory was in the development of their agoraphobia.

5. **Describing past memories might lead to improvements in agoraphobic behaviour**

It was found that at a week follow-up the agoraphobic avoidance as measured by the Fear Questionnaire (Marks & Mathews, 1979) had significantly decreased. There was also a possible trend decrease of the “avoidance when accompanied” as measured by the Mobility Inventory for Agoraphobia (Chambless, Caputo, Jasin, Gracely & Williams, 1985).
Discussion

Findings related to the literature

Other studies showing characteristics of images

Similarly to Hackmann, Clark and McManus (2000) study of imagery in socially anxious people, and Ottaviani and Beck’s (1987) study of imagery in those with panic disorder, all the people with agoraphobia in this study had recurrent images about an agoraphobic situation. None of the agoraphobic participants needed to hear the scripted fear scenarios to induce these images, so were identified spontaneously. The scenes that were described by the people with agoraphobia were typical agoraphobic fear situations as cited in DSM-IV, e.g. being in the street, on public transport, in a shop and far from home. All of the control participants needed to hear the scripted scenarios to induce their imagery of agoraphobic fear situations. None had spontaneous recurrent images. This is a difference between the two groups, as the results are comparing spontaneous versus induced imagery.

Most of these images used many sense modalities, however like Hackmann, Clark and McManus (2000) the most frequently represented sense modality for the agoraphobic group was vision and body sensations, whereas the control group were aware of aural and taste and smell representations. This could be due to the visual and body sensations being the most salient for the people with agoraphobia in fear imagery as the body focuses on senses that alert the individual to the potential fear situation. Hackmann (personal communication) suggests that in agoraphobia, the body sensations could be an important warning signal of danger to the individual. It is interesting to note that the amount of sense modalities utilised in the fear imagery compared to the relaxation imagery
also decreased for the control (except for body sensations which increased), which supports the idea of the body directing the body’s attention to the most important senses to alert of approaching danger.

The perspective taken in the fear imagery was an alternating one, between an internal and external perspective, which was significantly different to that taken in the relaxation scenario, which was predominantly internal. This is a different finding to that found by Wells and Papagergiou (1999) who concluded that people with agoraphobia might have a “chronic and stable perspective” of seeing themselves from an observer perspective. This difference may have emerged due to the different methodologies, for example in Wells and Papagergiou (1999) study participants were asked to recall a specific occasion where they felt anxious in a social situation. This question may not yield the same results as asking specifically about recurrent imagery. It is also unclear whether participants in this study were given the option of choosing an alternating perspective. A fluctuating perspective illustrates how frightening the experience must be for the individual, in that their perspective switches from looking at the scene, to looking at themselves. This must be quite disorientating for people. A fluctuating perspective between internal and external viewpoints for the agoraphobic group in the fear situation could highlight the relevant warning signals of danger being vision and body sensation as seen in the sense modalities utilised. It could be hypothesised that the perspective could be alternating between the looking at the self from an observer point of view at the effect of the panic symptoms, to an internal perspective of viewing the catastrophe occurring, and via versa. McNab (1993) also describes how
“switches” can take place for individuals experiencing panic that alternate between the experience of the world and oneself in it.

There were no differences between the two groups in terms of the clarity, vividness and reality of the fear image. This suggests that the control group were able to think about difficult situations in agoraphobic situations. However, both 85% from both groups thought that it would be a bad thing to think about the image for a long time.

The emotional valence of the image was more negative than the control, as rated by an independent marker, and this result is consistent with Hackmann, Clark and McManus (2000) study of the imagery in those with social phobia. The catastrophic interpretation of events in people with anxiety states has been widely written about (Beck, Laude & Bohnert, 1974; Hibbert, 1984) and formed the basis of cognitive behavioural therapies treating anxiety disorders by evaluating and modifying the client’s unrealistic appraisals of danger. The transcripts of the imagery from the agoraphobic group show this cognitive bias towards “catastrophising”.

Other studies showing characteristics of associated memories

All the participants in both groups were able to associate a memory with their fear images. This is similar to Hackmann, Clark and McManus (2000) who studied people with social phobia and found 96% of the sample had an associated memory. Wells and Hackmann (1993) also found that “in most instances” an aversive experience was linked to the imagery in those with health
Discussion

anxiety. The association of the memory and the image is discussed later in this chapter.

The mean age of the memories recalled in the agoraphobic group was 14.3 years (SD=13.4). The memories were more negative, as coded by an independent marker, than those recalled by the control group. The participants being able to recall associated memories is similar to the studies of associated memories in health anxiety (Wells & Hackmann, 1993) and social phobia (Hackmann, Clark & McManus, 2000), who have argued that the memories have a relationship with the onset of the disorder.

With regard to the sense modalities recalled in the memories, the agoraphobic group had significantly less aural and touch representations than the control group. As the memories of the agoraphobic were coded as more traumatic than the control group, as coded by an independent rater, it could be that using less sense modalities is related to the fear response, as mentioned earlier in the discussion. The associated memories of the people with agoraphobia were self rated as being significantly more vivid than the control group. This is consistent with work into PTSD (Grey, Holmes & Brewin, 2001), where it was found that traumatic memories are more vivid than memories that are not traumatic. There was no difference in the perspective taken in the associated memory between the two groups.

A high percentage of the agoraphobic participants responded that they did not fear agoraphobic situations before the time of the recalled memory. It is also
interesting to note that only three out of the twenty people with agoraphobia reported that they had thought about the associated memory before the interview, although acknowledged it had an effect on their agoraphobic anxiety. The impact of the interview and thinking about the imagery and associated memory caused many of the participants to comment on the importance of the discovery of this memory.

**Themes in the agoraphobic imagery related to the literature**

Figure 8 (pg. 119) shows the themes that emerged from the agoraphobic transcripts that were significantly different from those in the control group. All of the people with agoraphobia reported a physical catastrophe occurring in their imagery. Further themes of panic and dissociation, primary and complex emotions being felt, a lack to cope with the situation and a negative meaning given to the experience, were common. All the themes can be interrelated as illustrated in Figure 8 (Smith, 2000) and together show the strength of the agoraphobic maintenance.

The theme of an impending catastrophe occurring for those with agoraphobia has been highlighted in much of the literature. Westphal (1871) wrote about people (people with agoraphobia) being fearful of public places as it was thought something fearful was about to happen. DSM-IV defines agoraphobia as the fear of being in a place in which escape may be difficult in the event of a panic attack. Research suggests that people with agoraphobia are more fearful about having a panic attack in a place, rather than the place itself (Klein, 1987; Thorpe & Burns, 1983). In the imagery transcripts in this study, the data
suggests that the panic symptoms and the fear of an impending catastrophe are interrelated, with 90% of the people with agoraphobia talking about both a catastrophe and panic. The participants spoke about panic, but also about other dangers happening that might prevent their escape, such as being run over, not being able to pass, being attacked. It is interesting that the theme of panic for people with agoraphobia was not the only emotion that was fearful, but also humiliation, intimidation, and not being protected were also significant themes. It could be argued that the fear the participants feel about the catastrophe is due to misinterpreting panic symptoms, for example interpreting the signs of hyperventilation as a sign that the person is able to fall and collapse. However, from this data it seems that there are other strong themes that emerge that would need to be included in a cognitive model of panic.

The themes that emerged in the panic and dissociation category from the agoraphobic imagery support the vicious cycle of panic (Clark, 1986) as described in the introduction. In the imagery described by the sample, themes about the consequences of panic such as amplification and distortion of senses, disorientation and fear all emerged as significant differences compared to the control group. Eighty-five percent of the agoraphobic group spoke about panic symptoms being part of their fear imagery, and the scores on the Body Sensations Questionnaire (Chambless, Caputo, Bright & Gallagher, 1984) show that the group are significantly more frightened by these sensations than the control group. The themes that emerged in the overarching theme of "panic and dissociation" include sensory distortion, disorientation and changes in time. McNab (1993) describes the agoraphobic experience as one of "separation and
disintegration” where structures expand or contract in space, disappear, leaving
the person alone. McNab describes the agoraphobic as becoming increasingly
anxious as they try to retreat from this experience into “disconnectedness, into
“being-not-there”. Similarity between this description to the “panic and
dissociation” theme, plus the “desire to disappear” was present both in the
transcripts and the drawings by two of the participants included in Appendix 9.

The emotions that emerged as significant themes from the agoraphobic
transcripts were fear, shame, humiliation and intimidation. There was also a
desire to disappear. The fear cognition seems related to the panic sensations,
and the fear of the impending catastrophe occurring. In relation to the shame
and social humiliation, Hackmann (1998) also argued that agoraphobic clients
have social evaluative concerns. The theme of intimidation relates to the feeling
of being surrounded, or a sense of things looming in. This theme seems to relate
to the experience of panic and not being able to cope with this terrible situation.
Again, all these themes suggest that the imagery is more complex than just the
feeling of fear.

Thirty percent of the people with agoraphobia spoke about feeling as if they had
a lack of resources to cope with the situation. This theme seems related to the
Threat Appraisal Model (Clark, 1988; Salkovskis, 1988, 1991; Salkovskis,
Clark & Gelder, 1996). This model, described in the introduction, argues that
individuals implicitly calculate the strength of the threat based on the following
equation:
Perceived likelihood of danger X perceived “cost” of the danger
Anxiety =

Perceived coping ability + perceived rescue factors

The themes illustrated in this thesis show that the perceived likelihood of danger is judged as catastrophic, the “costs” include social humiliation, the perceived coping is judged as low (feeling intimidated, and having a negative view of self), and the perceived rescue factors are judged as others not helping or protecting. The threat appraisal model is useful to show how the anxiety in people with agoraphobia in this study is maintained. It also shows how all the themes that emerged from this study are related, such as the catastrophe, the panic, the emotions, underestimating resources to cope, and the negative meaning given to the self, others and the world.

The meaning given to the images by the agoraphobic group show that there is a negative view of self, others and the world. These themes suggest how the anxiety is maintained, as the self is judged to be ineffectual, others critical and unhelpful, and the world dangerous. As the agoraphobic feels that an overwhelming catastrophe will happen if they leave the house, then these beliefs about the self, others and the world would not be helpful in gaining the courage to face the fears. These themes relate to work into underlying schemas, which can give rise to psychological disorders in the long term (Young & Klosko, 1994).
Themes in the associated memories related to the literature

Figure 9 (pg. 120) shows the significant themes that emerged from the memories of the agoraphobic group. The similarity between the themes in the imagery and the associated memory are quite striking. Compared to the control, the significant themes in the associated memory of the agoraphobic group included a physical catastrophe, emotions of fear, anger and entrapment, needing to escape, not being able to protect the self, feeling a lack of protection by others, and a negative view of self.

All of the agoraphobic group described traumatic memories that they linked to their agoraphobic imagery. The catastrophic events included being abused by parents, drowning, feeling a plane would crash and being attacked. These events were accompanied by feelings of fear and anger, and a desire to escape. In the traumatic situation, the agoraphobic group were more likely to recall feelings of being unable to protect themselves and not getting help from other people around. The meaning of the memory was a negative view of the self. It can be seen how these themes are interrelated in that a lack of protection from others, and an inability to protect the self could mean a disaster would be more likely to occur. This could be related to the feelings of fear and anger at the self and others.

Other researchers have highlighted some, but not all of these themes, e.g. Goldstein and Chambless (1978) and Hackmann (1998). Goldstein and Chambless (1978) suggest that some people with agoraphobia have difficulty expressing and accepting negative emotions like anger. It is argued that due to a
lack of a secure base in childhood, painful feelings are suppressed which leads to chronic anxiety, non-assertiveness, lack of self sufficiency, a fear of being alone, and a fear of their own angry feelings. Hackmann (1998) speculates that as research (Chambless & Goldstein, 1982; Hoffart, 1995) has shown that some people with agoraphobia have a poor perception of their ability to cope with difficult situations, people with agoraphobia may have had early experiences that have lead to ideas about how difficult it is to cope in the world when one is alone. The themes of anger, early memories of abuse and neglect, other people not helping, and not being able to protect the self when alone, that emerged from the transcripts of the associated memories do seem to support these views of difficult early experiences and the setting down of negative beliefs about the self, others and the world.

The Cornell Panic-Anxiety Study Group (Busch, Milrod, Cooper & Shapiro, 1996; Milrod, Busch, Cooper & Shapiro, 1997; Shear, Cooper, Klerman, Busch & Shapiro, 1993) developed a psychodynamic theory of panic and agoraphobia. It is argued that due to “developmental trauma” and a neurophysiological vulnerability to panic attacks, a child becomes frightened of unfamiliar situations and becomes excessively dependent on the caregiver for safety. The caregiver is unable to give this sense of safety, so a fearful attachment is developed. The child becomes angry at the parent’s perceived or actual rejecting behaviour, but also fears loss because of the anger. This cycle of suppressing the anger lead to the onset of panic. In adulthood, this cycle is repeated and leads to intense feelings of abandonment, anger and anxiety. The self is viewed as weak and ineffectual and others are seen as powerful. Avoidance of situations leads to
a lack of opportunities to develop coping strategies. A treatment called Panic-focused Psychodynamic Psychotherapy (PFPP) has developed from this theory, which focuses on resolving these underlying conflicts, and examining the precipitants of panic. There are no controlled trials for this treatment, but it can be seen that similar themes are apparent in this theory as in the transcripts of the associated memories of the people with agoraphobia, that is early memories of anger, the dilemma of experiencing a lack of protection but also needing to escape, and a negative view of self. This theory and the findings from this thesis gives support to the idea that early beliefs and experiences may be an important area to explore in those with agoraphobia.

From a cognitive perspective, it could be hypothesised that the people with agoraphobia in this study had difficult experiences during childhood that led to negative core beliefs. That is, generalised beliefs about helplessness and/or unlovability (Beck, 1995) that developed in childhood due to interactions with others, or a series of situations. This may have led to intermediate beliefs, rules and assumptions, such as “I am helpless: therefore if I am in danger, I will not be able to protect myself” and “I am unlovable: if I am in danger other people would not help me”. Therefore, due to these beliefs, certain situations where escape has been difficult in the past (like the situations recalled in the memories of those with agoraphobia) are avoided or approached with anticipatory anxiety. This would make a panic attack more likely, and therefore a fear response could be maintained.
In the study of socially anxious participants, Hackmann, Clark & McManus (2000) suggested that the close similarity between their imagery and associated memories could show that early unpleasant social experiences may lead to the development of a negative, observer perspective image that is activated in social situations. In this study, it can be seen that an early traumatic memory that has similar themes to the recurrent agoraphobic imagery can be easily recalled. Therefore showing that early negative memories could be maintaining the fear in situations with similar meanings, through imagery.

Although the early memories recalled by the agoraphobic group did not occur round the time that the agoraphobia developed, it could be speculated that this memory has contributed to the maintenance of the disorder by the powerful influence the imagery, that has similar themes to the memory, has on agoraphobic avoidance. It could be that critical events that occur around the onset of agoraphobia may have similar meanings or characteristics, such as similar body sensations, to the early traumatic experiences, which may activate a disorder, such as agoraphobia, as seen in delayed onset PTSD (Buckley, Blanchard & Hickling, 1996). It would have useful for events around the time of the onset of agoraphobia to be elicited by the participants so that this hypothesis could be more carefully explored. Using Lang’s model (1977; 1979), described in the introduction, it could be speculated that an early traumatic memory may have acted as a fear template so when a situation with similar themes and characteristics is experienced, anxiety is evoked. As many of the agoraphobic memories focused on near death experiences such as drowning, falling, or suffocating, it could that this fear template either has similar themes i.e.
Discussion

concerning helplessness, anger, wanting to escape, or similar characteristics, such as body sensations, which leads to a tendency to misinterpret anxiety symptoms like hyperventilation as catastrophic, due to the fear they experienced in the past, as recalled in the memories.

The relationship between early aversive experiences and the development of anxiety disorders has a long history, and may be relevant to understanding the relationship between the early traumatic memories and the related imagery. Mowrer (1947; 1960) described a two-factor model to explain fear and avoidance behaviour. He suggested that fear of a specific stimuli is acquired through classical conditioning, and as fear is aversive, it is avoided, thereby the avoidance is reinforced. Solomon and Wynne (1954) added that if the fear becomes classically conditioned then the avoidance is very resistant to extinction. In relation to agoraphobia, Ost and Hugdahl (1981) found that eighty eight percent of agoraphobic patients attributed the onset of their phobia to a conditioning experience. Contrary to these findings, Mathews, Gelder, and Johnston (1981) found in the people with agoraphobia they studied there was little evidence of conditioning experiences. However, as Rachman (2002) points out, the figures in these studies cannot be taken at face value as the information is gained through a patient’s recollection, and therefore memory distortion and the operation of cognitive biases may have an effect on the results.

However, in this study, memories that the agoraphobic group said had an influence on their agoraphobic anxiety were similar in content to the images, which may be playing a part in the avoidance, so the two-factor model could
explain this relationship. For example, an early traumatic memory involving
cognitions about needing to escape, people not helping and an ability to protect
self could have conditioned a fear of being in places where escape is difficult,
and the agoraphobic constellation of emotions and panic could be induced.

Although the memories of the agoraphobic group were rated as being more
traumatic, 95% of the control group recalled negative experiences. This finding
suggests that it is not a negative event per se that can lay down the foundations
of a fear template that may be activated later in life, but the meaning that was
given to the event at the time, and subsequently. It can be seen that there was a
significant difference in the meaning of the memory being more negative about
the self in those with agoraphobia than in the control group. This supports the
work of cognitive therapy that suggests it is not the situation that causes fear but
the views that are taken of it (Beck, 1976). This also relates to the experimental
work discussed in the introduction of how the meaning that an external event is
given at the time of perception may remain the same unless the memory is
updated (Chambers & Reisberg, 1985; Reisberg, 2001). Therefore, if the
meaning of a traumatic experience is negative about the self, this will not be
updated unless the memory is re-appraised (Grey, Holmes & Brewin, 2001).

In the introduction it was emphasised that imagery had an input into memory,
and visa versa, therefore it could be suggested that the memories that were
spoken about by the people with agoraphobia were false memories, or
imaginative images. Mitchell & Johnson (1999) suggest that memories of
genuinely experienced events have increased sensory and contextual
information i.e., greater clarity and intensity and with more detail, than those simply imagined. As the memories were recalled spontaneously, and all were very elaborated, with the participants knowing the age that the memory occurred, suggests that the memories spoken about were genuine recollections.

The interview: understanding why the agoraphobic avoidance reduced

Surprisingly, in this study it was shown that one week after the interview, the agoraphobic avoidance as measured by the Fear Questionnaire (Marks & Mathews, 1979) had significantly reduced. There was also a possible trend decrease in avoidance when accompanied as measured by the Mobility Inventory for Agoraphobia (Chambless, Caputo, Jasin, Gracely & Williams, 1985). This was predicted in the research hypotheses following work into imagery rescripting and Lang’s (1977; 1979) theory of emotional imagery, as discussed in the introduction. Using imagery rescripting (Arntz & Weertman (1999), it is argued that by accessing the fear imagery, the original memory that may have led to generalised rules and assumptions about the self, others and the world may be recalled. By focusing on the memory, the client is able to reappraise the incident, and this may lead to new schemas and a reduction of the scope of the old schematic representation. Through therapy, the new schemas are reinforced to show that the original memory was an exception rather than the rule. In relation to this study, it could be speculated that exposure to the imagery, and the associated memory, may have led to a spontaneous reappraisal of the meaning of the memory by the participant that resulted in a reduction of the agoraphobic avoidance shown in the questionnaires. Lang’s (1977; 1979) theory of emotional imagery focuses on complete exposure to the imagery
Discussion

leading to treatment of the disorder due to stimulus, response and semantic propositions about the fear being evoked. It could be hypothesised that during the interview the agoraphobic participants were exposed to the imagery that is usually avoided. This may have led to a reappraisal of the information.

Rusch, Grunert, Mendelsohn and Smucker (2000) carried out a treatment trial of imagery rescripting for eleven clients with PTSD using only one session. The treatment involved four stages: the clients describing their images; education given about images by the researcher; a description of the treatment process; and the treatment. The treatment involved four trials of imaginal exposure (of about 2-3 minutes), imagery rescripting (where the clients were asked about the most distressing part of the image, and then encouraged to change this part of the image in some way) then exposure to the original image. This procedure resulted in a marked decrease in frequency and emotional impact of the image. The researchers argued that change occurred due to the creation of a humorous new image in place of the old distressing image, the clients having more control over the imagery, and the clients developing attributions of self-efficacy. One hypothesis about the reduction in agoraphobic avoidance in this study could be that exposure to the fearful, multi-modal images could have produced a spontaneous change in content, or attributions, which led to a reduction in the avoidance. This would need to be investigated in future studies, by gaining more information from the participants with agoraphobia about the changes that took place following the interview.
However, it must be noted that the sample size in this study was relatively small, and these results would need to be replicated to see if these results can be supported. The reduction in agoraphobic avoidance could also be due to the participation in an interview about their fears, where they were thinking about how things are, which may have led to a spontaneous reappraisal of their fears. Also, three participants experienced a panic attack during the interview, so a brief conversation about breathing retraining took place, and this may have an influence on their avoidance by the participants feeling they had more coping strategies. Another factor that may have played a part in the reduction of the agoraphobic avoidance was the observation of the similarity between the imagery and the memory. Many participants commented on how this was a new observation for them, and thought that it might be a significant factor in maintaining their fears. It could be speculated that for many people with agoraphobic fears, giving a meaning to the symptoms in the form of an associated memory, whether the memory played a realistic part in the disorder or not, could have triggered off an understanding of their condition which increased motivation to change. Further exploration of this finding would be needed to understand the mechanisms underlying the change.

**Limitations of the research**

Although the results of this research are interesting, the sample size of twenty people with agoraphobia is relatively small, although comparable to other studies exploring imagery in psychological disorders. Interviewing this sample group proved quite difficult in terms of a small number of clients attending psychology departments in the boroughs where the research was carried out,
plus some of the clients being quite resistant to taking part in the project. The people with agoraphobia that took part appreciated the interview taking part in their homes, however a number of potential clients found this difficult also, and refused to let me into their homes when I arrived. Therefore, the sample that was interviewed may be only representative of those people with agoraphobia who have sought treatment, and are not as avoidant in terms of talking about their fears. It may have been easier to recruit a broader range of participants experiencing agoraphobic fears if the interview was conducted by a clinician that they knew, or by telephone. The use of telephone interviews was discussed for the methodology of this project, however it was thought that as potentially difficult material was going to be discussed, a face-to-face interview would be preferable. In three of the interviews, the participant with agoraphobia did experience panic attacks, and as the clients had not begun treatment, due to the face-to-face contact a conversation about breathing retraining could take place.

The agoraphobic sample gained in this study consisted of twenty white people in inner city London. It was a surprising to find such an ethnically homogenous group, and could highlight differences in this sample in accessing services. Therefore, some caution may be needed when applying these findings to a more ethnically diverse population. With regard to all the participants living in an urban city, many of the agoraphobic participants were living in overcrowded estates. This meant that there was a realistic fear of being attacked and more chance of other people not getting involved. Therefore, the population used may be more biased towards feeling less safe than people living in other places.
Discussion

places. Replication would be needed to see if living conditions and ethnicity played a part in influencing the results.

In relation to the interview, a relaxation scenario of being on a beach was devised so participants could feel more comfortable about talking about their imagery. Unexpectedly, being on a beach was a distressing scene to think about for some of the people with agoraphobia, as it meant they had to imagine being far from home and in a large open space with other people. It would have been more preferable to have a relaxation scene that the participants chose themselves, or set the relaxation scene in their own homes.

With regard to some of the measures, it would have been useful to get each participant to rate the emotional valence of the imagery and the associated memory. Using an independent rating of them was useful in gaining an objective measure, but a participant rating would have given an insight into how traumatic the imagery and memory was to the individual.

A further limitation of the study was the response rate of the follow-up questionnaires. Interestingly, the people with agoraphobia returned more of the follow up questionnaires than the control group, however some of the people with agoraphobia spoke about not being able to walk to the post box to send back the questionnaires. The researcher collecting the questionnaires from the individual’s home could have prevented this. In relation to the control group, a second meeting with the researcher to fill in the questionnaires may have improved the response rate. The meaning of the agoraphobic avoidance
reducing a week after the interview could have been elaborated on using either a second meeting or a quantitative questionnaire to find out more about how the interview may have effected their fears.

**Implications of the research**

**Theoretical implications**

The findings of this research project support the association of the content of the images being related to past traumatic memories. Many of the participants spoke about the similarity between their imagery and a past experience therefore giving support to the argument about imagery having an input into memories, and possibly also the other way round.

In the introduction of the thesis, the relationship between imagery and memory was discussed. Martin and Williams (1990) argued that there was a continuum with near veridical reconstructions of real events on one end, and totally imaginative constructions on the other. Hackmann (1998) also supported that idea of images and memories containing an input from each other, and described the relationship as a "grey area". Lang (1977; 1979) argued that knowledge about images are stored in propositional form in the long term memory, and only exposure to this image can challenge the knowledge stored alongside it. In a similar way from the experimental studies into imagery, it could be seen that there was a close relationship between perception and imagery, and that the meaning of the image could be fixed from the time of perception, and that images contain facts and opinions that were present at the time of perception. Further studies linking imagery and memory include work
into PTSD, where traumatic memories can emerge in the form of nightmares, intrusive memories and flashbacks (Foa, Molnar & Cashman, 1995), work into social anxiety (Hackmann, Clark & McManus, 2000) where the recurrent imagery was associated with memories of situations that occurred around the onset of the disorder, similarly with health anxiety (Wells & Hackmann, 1993), and the association of imagery in depression with past abusive memories (Kuyken & Brewin, 1994).

Theoretically, this has many implications in terms of the onset and maintenance of anxiety disorders. If imagery can provide a way of accessing past memories that contain information about cognitive schemas and the unique meanings of the memory, then it is an efficient way of having a fuller understanding of the individual fear system that could be worked on in treatment. It may also be that these past traumatic memories could be stored in a fragmented form, as in PTSD, and uncovering them could lead to successful emotional processing.

In the introduction, it was shown that many researchers argued that imagery provides a way of learning information about the individual that they may not talk about verbally, or do not have access to. From the transcripts of the people with agoraphobia interviewed it could be seen that, in a short time, information concerning their fears, the worst thing about the image, core beliefs concerning themselves, others and the world, and associated memories emerged. Talking about the imagery provided a wealth of information about the participant that may have been more difficult to access verbally. Therefore, the work in the thesis supports the arguments that suggest that asking about imagery is an
important way of finding out more information about the fear, and why the fear is so threatening.

The finding in this thesis, such as the underlying meanings of the imagery and the associated memory concerning the self, others and the world, plus the other themes that emerge such as shame and social humiliation, give support to the use of individually tailored formulations. The findings suggest that the vicious cycle of panic (Clark, 1986), which focuses on just the panic sensations, does not fully capture the whole experience, especially the interpersonal aspect, of those with agoraphobia.

**Clinical Implications**

In the introduction, the importance of imagery in clinical practice was highlighted. In terms of treatment, it was argued that exposure to imagery was used in systematic desensitisation, implosion therapy, decatastrophising, EMDR and cognitive therapy. Exploring the imagery in agoraphobia has been shown in this thesis to a very useful way of uncovering core beliefs about the self, others and the world, and the content and meaning of the fears. The imagery also gave access to an associated memories and experiences that may have given rise to these beliefs and fears. In relation to treatment, this has many implications. An example is the support this thesis gives to the usefulness of imagery rescripting, which shows how exploring the imagery can give space to reappraisal of the fears and challenge the underlying meaning of the experience. Although many of the associated memories were traumatic, all the participants did escape and survived the catastrophe, but this was not a theme that emerged from the
agoraphobic transcripts. In contrast, the theme of normalisation was present in 50% of the transcripts in the control group. If new information about the strengths and coping skills that the participants with agoraphobia showed in the associated memories could be highlighted and processed, this may have an effect on the participant’s appraisal of their resources to cope with difficult situations. The imagery also illustrates how exaggerated the high emotion that a disaster is about to happen is in agoraphobia, and highlighting the cognitive biases such as ‘catastrophising’, ‘magnifying’ and ‘polarised thinking’ (Beck, Emery & Greenberg, 1985) would be useful.

The transcripts in this thesis also show the individuality of the fear experience, and the meanings of the experience attached to it. This suggests that cognitive therapies, where individual meanings are explored and challenged, have a lot to offer in the treatment of agoraphobia. Currently, behavioural treatments of in vivo exposure for agoraphobia are very common within clinical psychology departments (Roth & Fonagy, 1996), for example setting up graded hierarchies, like walking down the street, for the person to achieve. This thesis suggests that although in vivo exposure would challenge the individual’s beliefs about ability to cope, it may not tackle the underlying schemas that may have given rise to the disorder. This could be treated using cognitive techniques including imagery rescripting.

Research discussed in the introduction shows that imagery can maintain fears as the images provide visual pictures of what the individual expects to occur in the situation, for example in obsessive-compulsive disorder (de Silva, 1986), health
Discussion

anxiety (Wells & Hackmann, 1993), simple phobias (Beck, 1985), and social anxiety (Hackmann, Clark & McManus, 2000). The transcripts of the people with agoraphobia interviewed in this study suggest that the recurrent images, of a catastrophic situation occurring that will not be able to be dealt with, do play a part in maintaining the fear, and hence the continuation of agoraphobic avoidance. All the people with agoraphobia in this study did have recurrent images, and therefore asking about imagery in the clinical session seems a very useful way of understanding why it is so threatening for many people with agoraphobia to leave the safety of their homes. Asking agoraphobic clients to describe their recurrent images also provides a way for the clinician to understand how terrifying confronting their fears is to the client. Two of the participants experiencing agoraphobic fears drew some of their recurrent images to provide more understanding of their fears (see Appendix 9). As can be seen by viewing these drawings, a lot of information can be gained about their fears that may not translate to purely verbal conversation. Therefore, this finding suggests that imagery should be asked about during clinical assessment. It would also be interesting to see how the images change during the course of therapy. It would be hypothesised that the images would become less catastrophic and the resources available to deal with the situation would be increased, as the treatment progressed.

In relation to new work into virtual reality (VR) therapy, which is still in its early stages for treating anxiety disorders (Marks, Shaw & Parkin, 1998), Taylor (2000) discusses how VR driving stimulators could be used as part of the treatment protocol for situational exposure and inducing arousal-related body
sensations in people. The work in this thesis suggests that an important element of recreating the panic experience is to include the fluctuating perspective that people with agoraphobia have of themselves, switching between an observer to an internal perspective, and all the other themes that emerged, such as the interpersonal aspect of social humiliation.

Ideas for further study

This study has opened up many questions about the phenomenology of agoraphobia that could not be answered in this thesis. It would be interesting to explore in another study the hypothesis of whether critical events that occurred around the same time as the onset of agoraphobia had similar themes and characteristics as the memories that emerged as being associated to the fear imagery. This could be achieved using a similar methodology to this study, but asking about the memory most closely associated with the beginning of the agoraphobia. It would also be useful to explore more carefully whether the link between the image and the associated memory is the themes and meanings of the situation, or whether it has more to do with the similarity in body sensations, which may give a pre-disposition to misinterpreting panic symptoms. This could be studied using a detailed measure of body sensations and asking about the most salient feature of the image and the memory.

A further area for research is the fluctuating perspective seen in the fear imagery of the agoraphobic group. It would be useful to know at what points the imagery changes, and whether the hypothesis about internal perspective relating to the visual aspects of the fear, and the external perspective relating to watching the
body sensations can be supported. More detail could be asked about perspective in various “hotspots” (periods of intense emotional distress) of the imagery and the memory, and asking about where the individual’s attention is most focused.

Another finding that merits further study is whether the decrease in agoraphobic avoidance is maintained at a longer follow up. It would also be useful to have more information about what the changes in behaviour and cognitions were for the agoraphobic group one week after the interview. This could be studied by a replication of this thesis but a more thorough investigation of symptom change at follow-up using a structured questionnaire about behaviour change and attributions. An extension of this work would be to conduct a treatment trial for agoraphobia using imagery rescripting techniques (exposure to the imagery plus modifying and challenging the image and traumatic memories) and monitor the change in imagery content.

It would also be useful to compare the imagery and associated memories of people with agoraphobia to those with panic disorder. The hypothesis from this study would be that people with agoraphobia are different to those with panic disorder due to the core beliefs about themselves. However, it would be interesting to see whether panic disorder clients have associated memories linked to their fear imagery that are linked by similar themes and characteristics (such as body sensations). This could be studied using the same modified imagery questionnaire as used in this study.
An interesting addition to work into agoraphobia would be a qualitative interview with the agoraphobic clients about what it was like to have agoraphobia. The mean number of years that the participants in this study were agoraphobic was 14.3 years (SD=13.4 years). For some of the participants with agoraphobia, I was the first stranger they had spoken to for many years. Some of the participants spoke about not having left the house for many years, and only experiencing what life was like outside their house from the television, for example what it was like to be on a train or to go abroad. A qualitative interview focusing on the fears people have concerning changing their way of life after such a long time may bring out important factors useful in increasing treatment motivation and remaining in treatment (24% drop out rate according to Roth and Fonagy, 1996). It seems that there must be many people with agoraphobia who do not seek treatment, due to the way the referral system works, and as they do not generally cause attention to others, may remain forgotten in their homes. However, getting more people with agoraphobia to attend psychology departments for treatment would be a challenge as can be seen in this study, many people with agoraphobia will not go outside due to a feared catastrophe, believe things will not change due to their low self esteem, and think other people and the world is generally negative. It seems that treatment may have to start in the clients home to get a better treatment attendance rate for those with agoraphobia.

Lastly, this thesis has highlighted the importance in exploring the imagery and associated memories in agoraphobia, and other research has shown the usefulness of looking at imagery and associated memories in other disorders e.g.
social anxiety, depression, PTSD and health anxiety. It would be useful to extend this work into other disorders such as obsessive-compulsive disorder, body dysmorphic disorder and elective mutism to see whether the use of imagery, and the uncovering of early traumatic memories can benefit clients.

As this thesis has shown, although some understanding of the experience of agoraphobia is known, much more research needs to be completed to answer some of the questions posed. It is hoped that this thesis goes some way in adding more knowledge about the experience, development and maintenance of agoraphobia, and that some of the ideas will in turn benefit people with agoraphobia.
REFERENCES


References


- 153 -


References


References


Myers, J.K., Weissman, M.M., Tischler, G.L., Holzer, C.E., Leaf, P.J.,


References


Appendices

Ethics
1. Approval letters
2. Information sheet
3. Letter to participant
4. Consent form

Measures
5. Questionnaires
6. Interview
7. Content Analysis coding frame

Data
8. Summary of transcripts of qualitative data
9. Drawings of imagery from participants
Appendices

Ethics

1. Approval letters
2. Information sheet
3. Letter to participant
4. Consent form
East London and The City NHS

Health Authority

Aneurin Bevan House
81 Commercial Road
London E1 1RD

Tel: 020 7655 6600
Fax: 020 7655 6666

February 2002

Ref: DO/SG/N/01/118

Dear Ms Day

Subject: N/01/118 - Exploration of imagery in those with agoraphobia

Thank you for your letter of 6th January 2002 addressing the points of the Subcommittee's earlier letter. I am happy to tell you that I am now able to approve your study on Chairman's action to be noted at future meeting of the Committee.

Please note the following conditions to the approval:

The Committee's approval is for the length of time specified in your application. If you expect your project to take longer to complete (i.e. collection of data), a letter from the principal investigator to the Chairman will be required to further extend the research. This will help the Committee to maintain comprehensive records.

Any changes to the protocol must be notified to the Committee. Such changes may not be implemented without the Committee or Chairman's approval.

The Committee should be notified immediately of any serious adverse events or if the study is terminated prematurely.

You are responsible for consulting with colleagues and/or other groups who may be involved or affected by the research, such as extra work for laboratories.

You must ensure that, where appropriate, nursing and other staff are made aware that research in progress on patients with whom they are concerned has been approved by the Committee.

The Committee should be sent one copy of any publication arising from your study, or a summary if there is to be no publication.

Chairman: Professor Elaine Murphy
Chief Executive: Carolyn Regan
would be grateful if you would inform all concerned with the study of the above decision.

Our application has been approved on the understanding that you comply with good Clinical Practice and that all raw data is retained and available for inspection for 15 years.

Please quote the above study number in any future related correspondence.

Yours sincerely

[Signature]

ORA OPOKU
Chair
CHA Research Ethics Sub-Committee
An exploration of imagery of those with agoraphobia

Ref: 01/24 (please quote in all further correspondence)

An exploration of imagery of those with agoraphobia

Please to inform you that after careful consideration the Local Research Ethics Committee has no objections to your project proceeding. This opinion has also been communicated to the Research Development Unit of Camden & Islington Mental Health NHS Trust.

BE NOTE THAT THIS OPINION ALONE DOES NOT ENTITLE YOU TO BEGIN RESEARCH

Camden and Islington Community LREC considers the ethics of proposed research projects and provides advice to NHS bodies under the auspices of which the research is intended to take place. It is a body which has the responsibility to decide whether or not the project should go ahead, taking into account the ethical advice of the LREC. Where these procedures take place on NHS premises or with NHS patients, the researcher must obtain the agreement of local NHS management, who will need to assure that the researcher holds an appropriate NHS contract, and that indemnity issues have been adequately addressed.

Camden and Islington Community LREC is an independent body providing advice to the North London Community Research Consortium. A favourable opinion from the LREC and approval from the Trust to commence research on Trust premises or patients are NOT one and the same. Trust approval is notified through the Research & Development Unit.

Following conditions apply to this project:

You must write and inform the Committee of the start date of your project. The Committee (via the Local Research Ethics Committee Administrator or the Chair at the above address) must also receive notification:

a) when the study commences;
b) when the study is complete;
c) if it fails to start or is abandoned;
d) if the investigator(s) change and

e) if any amendments to the study are made.

The Committee must receive immediate notification of any adverse or unforeseen circumstances arising out of the project.

Research Ethics Committees Heath Service Guidelines (91)5, NHS Management Executive, 19 August commonly known as The Red Book).
is the responsibility of the investigators to ensure that all associated staff, including nursing staff, are informed of research projects and are told that they have the approval of the Ethics Committee and management approval from the body hosting the research.

The Committee will require a copy of the report on completion of the project and may request details of the progress of the research project periodically (i.e. annually for longer projects).

Data is to be stored on a computer in such a way as to make it possible to identify individuals, so the project must be registered under the Data Protection Act 1998. Please consult your department data protection officer for advice.

Failure to adhere to these conditions set out above will result in the invalidation of this Letter of No Objection.

Please forward any additional information/amendments regarding your study to the Local Research Ethics Committee Administrator or the Chair at the above address.

Sincerely

[Signature]

Research Ethics Committee Administrator or the Chair at the above address.
Dear Dr Holmes

Study No: 01/0192 (Please quote in all correspondence)
Title: Exploration of imagery in those with agoraphobia

Thank you very much for letting us see the above application which was reviewed by the Chairman and agreed by Chairman’s Action. There are no objections on ethical grounds to this study going ahead.

Please note that it is important that you notify the Committee of any adverse events or changes (name of investigator etc) relating to this project. You should also notify the Committee on completion of the project, or indeed if the project is abandoned. Please remember to quote the above number in any correspondence.

Yours sincerely

Michael Harrison
Co-Chairman
2. Information Sheet
CONFIDENTIAL

(Form on Hunter Street headed paper)

INFORMATION FORM January, 2001

Title of Project: Phenomenology of Imagery in people with agoraphobic-type fears.

Name of Researcher: Samantha Day

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully, and discuss it with friends and your GP if you wish. Please ask if there is anything that is not clear or you would like more information. Take time to decide whether or not you wish to take part.

Past research has shown that the themes of people's imagery can be very useful in understanding why certain fears develop and are maintained. This study will be exploring the imagery in those experiencing "agoraphobic" fears, for example the fear of leaving one's home. By exploring the imagery in people who may have agoraphobia, we can begin to answer certain questions about agoraphobia and anxiety disorders in general. Firstly, we aim to explore whether there are similar themes in the imagery of those experiencing agoraphobic problems. Secondly, whether these themes relate to central beliefs that the person has about the world. Finally, whether the themes in the imagery relate to past experiences from the individual's life. Answering these questions will be useful in understanding the role that imagery has in agoraphobia and anxiety disorders in general. It will give more information for the development of treatment protocols.

You have been asked to take part in this research as we are looking for people experiencing agoraphobic-type fears. We aim to interview twenty six people who are experiencing these fears. Your participation would be greatly appreciated.

You do not have to take part in this study if you do not want to. If you decide to take part you may withdraw at any time without having to give a reason. Your decision to take part or not will not affect your care and management in any way.

If you decide to take part, you will be visited at home by the researcher at a time that is convenient for you. You will be asked to fill in eight short questionnaires. The questionnaires will take about 20 minutes to fill in. You will then be asked questions from a semi-structured interview about your imagery and what the imagery means. The interview will take 40 minutes. Therefore the total time is approximately one hour. After this first visit, six brief follow-up questionnaires will be sent through the post for you to fill in and return.
It is possible that some people may experience some distress talking about their imagery. Although this is unusual, a phone number is given below for you to contact if you need to talk to someone. Many people actually benefit from talking about their images and fears and you may see an improvement in your symptoms and distress.

All information that is collected about you during the course of the research will be kept strictly confidential. If you wish, a summary of your results will be provided to your clinician at Hunter Street. This may help your assessment for treatment.

The results of the study will be published in a Psychology Journal and no one taking part in the research will be identified.

All proposals for research using human participants are reviewed by an ethics committee before they can proceed. This proposal was reviewed by Camden and Islington Ethics Committee.

If you would like any further information Samantha Day can be contacted by leaving a message on: 020 7380 7897 (daysamantha@hotmail.com) or at Sub. department of Clinical Health Psychology, Gower street, London WC1E 6BT.
3. Letter to participant
Dear,

I am a trainee Clinical Psychologist running a research project at Hunter Street Health Centre. I received your name through the Health Centre where, as you know, you have been referred by your GP to the Psychology Department.

I am writing to invite you to take part in a research project exploring the images that people who have fears about leaving their home can have. This project will have implications in developing our understanding about these fears and for treatment development.

The study involves filling in questionnaires and answering questions about the images that can occur in relation to specific fears. There are no wrong or right answers to these questions, I am interested in your own experience. The whole procedure takes about an hour to hour-and-a-half and can take place in your own home at any time that is convenient with you. A leaflet (title: information form) is enclosed giving more information about the project.

Taking part in this project is entirely voluntary and you if you decide to take part, you can withdraw at any time without having a reason. Your decision to take part or not, will not affect your care and management in this service in any way.

If you would like further information, or would like to take part in this study, could you contact me on 020 7380 7897, or by post at the Sub. Dept. of Clinical Health Psychology, Gower Street, London WC1E 6BT.

Thank you for your time,

Yours Sincerely,

Samantha Day
Trainee Clinical Psychologist

Supervised by Dr. Emily Holmes
Clinical Psychologist

Dr. Peter Scragg
Clinical Psychologist
Appendices

4. Consent Form
Title of Project: Phenomenology of Imagery in people with agoraphobic-type fears.

Name of Researcher: Samantha Day

1. I confirm that I have read and understand the information sheet dated January, 2001 for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

3. I agree to take part in the above study.

Name of Patient Date Signature

Name of Person taking consent Date Signature
(If different from researcher)

Researcher Date Signature
Appendices

Measures

5. Questionnaires
6. Interview
7. Content Analysis coding frame
Body Sensation Questionnaire

Below is a list of specific body sensations that may occur when you are nervous or in a feared situation. Please mark down how afraid you are of these feelings. Use the following five point scale, from not worried to extremely frightened.

1. Not frightened or worried by this sensation.
2. Somewhat frightened by this sensation.
3. Moderately frightened by this sensation.
4. Very frightened by this sensation.
5. Extremely frightened by this sensation.

1. Heart palpitations
2. Pressure or heavy feeling in the chest
3. Numbness in arms or legs
4. Tingling in the fingertips
5. Numbness in another part of your body
6. Feeling short of breath
7. Dizziness
8. Blurred or distorted vision
9. Nausea
10. having 'butterflies' in your stomach
11. Feeling a knot in your stomach
12. Having a lump in your throat
13. Wobbly or rubber legs
14. Sweating
15. A dry throat
16. Feeling disoriented and confused
17. Feeling disconnected from your body:
   only partly present
18. Others

Please go back over the items and circle the three sensations which you find most difficult in your life. These feelings would be the frightening feelings which occur most frequently. Please label them 1, 2, and 3 to indicate the order (ie 1=most frightening)
The Mobility Inventory for Agoraphobia

Your name  Date

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 a trusted companion and when you are alone. Do this by using the following scale.

1. Never avoid  
2. Rarely avoid  
3. Avoid about half the time  
4. Avoid most of the time  
5. Always avoid  

(You may use numbers half-way between those listed when you think it is appropriate, for example, 3.5 or 4.5)

Write your score in the blanks for each situation or place under both conditions: when accompanied and when alone. Leave blank situations that do not apply to you.

<table>
<thead>
<tr>
<th>Places</th>
<th>When accompanied</th>
<th>When alone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Theatre</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>2. Supermarkets</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>3. Classrooms</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>4. Department stores</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>5. Restaurants</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>6. Museums</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>7. Lifts</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>8. Auditoriums or stadiums</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>9. Garages</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>10 High places</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Please tell how high:</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>11 Enclosed places (e.g., tunnels)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>12 Outside (for example fields, wide streets, courtyards)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>13 Inside (for example large rooms, lobbies)</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>
Travelling in

<table>
<thead>
<tr>
<th></th>
<th>When accompanied</th>
<th>When alone</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Buses</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>15. Trains</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>16. Subways</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>17. Airplanes</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>18. Boats</td>
<td>--------</td>
<td>--------</td>
</tr>
</tbody>
</table>

Driving or traveling in car

<table>
<thead>
<tr>
<th></th>
<th>When accompanied</th>
<th>When alone</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. at anytime</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>20. on motorways</td>
<td>--------</td>
<td>--------</td>
</tr>
</tbody>
</table>

Situations

<table>
<thead>
<tr>
<th></th>
<th>When accompanied</th>
<th>When alone</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Standing in queues</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>22. Crossing bridges</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>23. Parties or social gathering</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>24. Walking in the street</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>25. Staying at home alone</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>26. Being far away from home</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>27. Others (specify)</td>
<td>--------</td>
<td>--------</td>
</tr>
</tbody>
</table>

We define a panic attack as:

(a) a high level of anxiety accompanied by
(b) strong body reactions (heart palpitation, sweating, muscle tremors, dizziness, nausea)
with
(c) the temporary loss of the ability to plan, think, or reason, and
(d) the intense desire to escape or flee the situation

28. Please indicate the total number of panic attacks you have had in the last seven days | -------- |

29. On average, how severe or intense have the panic attacks been?

1. Very mild
2. Mild
3. Moderately severe
4. Very Severe
5. Extremely severe
Beck Anxiety Inventory

Below is a list of common symptoms of anxiety. Please read each item in the list carefully. Indicate how much you have been bothered by each symptom during the last week, including today by placing an X in the corresponding space in the column next to each symptom.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Mildly It did not bother me much</th>
<th>Moderately It was unpleasant but I could stand it</th>
<th>Severely I could barely stand it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Numbness or tingling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Feeling hot</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Wobbliness in legs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Unable to relax</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Fear of the worst happening</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Dizzy or lightheaded</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Heart pounding or racing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Unsteady</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Terrified</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Nervous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Feelings of choking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Hands trembling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Shaky</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Fear of losing control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Difficulty breathing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Fear of dying</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Scared</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Indigestion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Faint</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Face flushed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Sweating (not due to heat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Fear Questionnaire**

Choose a number from the scale below to show how much you would avoid each of the situations listed below because of fear or other unpleasant feelings. Then write the number you chose opposite each situation.

<table>
<thead>
<tr>
<th>Would not avoid it</th>
<th>Slightly avoid it</th>
<th>Definitely avoid it</th>
<th>Markedly avoid it</th>
<th>Always avoid it</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Main phobia you want treated
2. Injections or minor surgery
3. Eating or drinking with other people
4. Hospitals
5. Traveling alone by bus or coach
6. Walking alone in busy streets
7. Being watched or stared at
8. Going into crowded shops
9. Talking to people in authority
10. Sight of blood
11. Being criticized
12. Going alone far from home
13. Thought of injury or illness
14. Speaking or acting to an audience
15. Large open spaces
16. Going to the dentist
17. Other situations (please describe)

Now choose a number from the scale below to show how much you are troubled by each problem listed, and write the number in the box below.

<table>
<thead>
<tr>
<th>Hardly at all</th>
<th>Slightly troublesome</th>
<th>Definitely troublesome</th>
<th>Markedly troublesome</th>
<th>Very severely troublesome</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

18. Feeling miserable or depressed
19. Feeling irritable or angry
20. Feeling tense or panicky ----- 
21. Upsetting thoughts coming into your mind ----- 
22. Feeling you or your surrounding are strange or unreal ----- 
23. Other feelings (describe) ----- 

How would you rate the present state of your phobic symptoms on the scale below? Please circle one number between 0 and 8.

0 No phobias present
1
2 Slightly disturbing/ not really disabling
3
4 Definitely disturbing/ disabling
5
6 Markedly disturbing/ disabling
7
8 Very severely disturbing/ disabling
Below are some thoughts or ideas that may go through your mind when you are nervous or frightened. 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 RIGHT hand side of each item.

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

<table>
<thead>
<tr>
<th>Thought</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am going to throw up</td>
<td>_____</td>
</tr>
<tr>
<td>I am going to pass out</td>
<td>_____</td>
</tr>
<tr>
<td>I must have a brain tumour</td>
<td>_____</td>
</tr>
<tr>
<td>I will have a heart attack</td>
<td>_____</td>
</tr>
<tr>
<td>I will choke to death</td>
<td>_____</td>
</tr>
<tr>
<td>I am going to act foolish</td>
<td>_____</td>
</tr>
<tr>
<td>I am going blind</td>
<td>_____</td>
</tr>
<tr>
<td>I will not be able to control myself</td>
<td>_____</td>
</tr>
<tr>
<td>I will hurt someone</td>
<td>_____</td>
</tr>
<tr>
<td>I am going to have a stroke</td>
<td>_____</td>
</tr>
<tr>
<td>I am going to go crazy</td>
<td>_____</td>
</tr>
<tr>
<td>I am going to scream</td>
<td>_____</td>
</tr>
<tr>
<td>I am going to babble and talk funny</td>
<td>_____</td>
</tr>
<tr>
<td>I will be paralysed with fear</td>
<td>_____</td>
</tr>
</tbody>
</table>
**BDI**

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling in the past week, including today. Circle the number beside the statement you picked. If several statements in the group seem to apply equally, circle each one. Be sure to read all the statements in each group before making your choice.

1. I do not feel sad
2. I feel sad
3. I am sad all the time and I can't snap out of it
4. I am so sad or unhappy that I can't stand it

1. I am not particularly discouraged about the future
2. I feel discouraged about the future
3. I feel I have nothing to look forward to
4. I feel that the future is hopeless and the things cannot improve

1. I do not feel like a failure
2. I feel I have failed more than the average person
3. As I look back on my life, all I can see is a lot of failures
4. I feel I am a complete failure as a person

1. I get as much satisfaction out of things as I used to
2. I don't enjoy things as much as I used to
3. I don't get real satisfaction out of anything anymore
4. I am dissatisfied or bored with everything

1. I don't feel particularly guilty
2. I feel guilty a good part of the time
3. I feel quite guilty most of the time
4. I feel guilty all of the time

1. I don't feel I am being punished
2. I feel I may be punished
3. I expect to be punished
4. I feel I am being punished

1. I don't feel I am any worse than anybody else
2. I am critical of myself for my weaknesses or mistakes
3. I blame myself all the time for my faults
4. I blame myself for everything that happens

1. I don't have thoughts about killing myself
2. I have thoughts about killing myself, but would not carry them out
3. I would like to kill myself
4. I would kill myself if I had the chance
6. Interview
Semi-structured questionnaire

NAME:

DATE:

CODE:

SEX:

ETHNICITY:

AGE:

YRS IN EDUCATION:

ONSET OF AGORAPHOBIA:

INTERVIEWER:
Relaxation images

I’d like to talk to you about some of the things that go through your mind when you are relaxed. Usually when people are very relaxed a mixture of thoughts and images and fleeting pictures can through their minds.

I am going to ask you to think of a situation, and then I will ask you some things about it. Can you close your eyes, try, and relax. I would like you to think about a beach, either one you have been to or one in your mind. Can you try to imagine the sand, the look of the sea, the sun on your skin?

- Have you got it?
  Yes/No

Now I would like you to imagine a dog running across the beach. Can you see that?

Yes/No
If the answer is yes, continue interview:

- Can you see anything in the image? Can you describe it to me, so that a film director may be able to recreate the scene?

- Can you hear anything? Apart from your own voice?

- What about taste or smell?

- What physical sensations do you have in your body?

I am going to show you a scale between 0-10, and ask you about physical sensations you may have in the image. The scale runs from where 0 to 10, where 0 is not feeling the sensation at all, and 10 is feeling the sensation as much as you could. Could you rate these sensations as you think about the image you have just been thinking of:
Heart palpitations
Pressure in chest
Numbness in arms of legs
Feeling short of breath
Blurred/distorted vision
Nausea
Lump in throat
Wobbly legs
Sweating
Dry throat
Feeling disoriented
Feeling disconnected from your body

- Is anyone else in the image?

- Can you feel anything, as in touch?
  
  - Can you tell me if there are any thoughts running through your mind?

I am going to show you a scale between 0-10, and ask you about thoughts you may have in the image. The scale runs from where 0 to 10, where 0 is not feeling the thought at all, and 10 is feeling the thought as much as you could. Could you rate these thoughts as you think about the image you have just been thinking of:

<table>
<thead>
<tr>
<th>Thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am going to throw up</td>
</tr>
<tr>
<td>I am going to pass out</td>
</tr>
<tr>
<td>I must have a brain tumour</td>
</tr>
<tr>
<td>I will have a heart attack</td>
</tr>
<tr>
<td>I will choke to death</td>
</tr>
<tr>
<td>I am going to act foolishly</td>
</tr>
<tr>
<td>I am going blind</td>
</tr>
<tr>
<td>I will not be able to control myself</td>
</tr>
<tr>
<td>I will hurt someone</td>
</tr>
<tr>
<td>I am going to have a stroke</td>
</tr>
<tr>
<td>I am going crazy</td>
</tr>
<tr>
<td>I am going to scream</td>
</tr>
<tr>
<td>I am going to babble and talk funny</td>
</tr>
<tr>
<td>I will be paralysed with fear</td>
</tr>
</tbody>
</table>
Thinking about the image you have just had, is your predominant impression one of viewing the situation as if looking out your eyes. Or is your impression observing yourself, looking at yourself from an external point of view. I am going to show you a rating scale of between -3 and +3. At this end (minus end), -3 represents seeing the scene entirely through your eyes, and +3 represents observing yourself as though thought an external point of view. Where would you be on the scale?
(Scale 1)

How do you feel in the image? (list emotions cited)

I am going to show you a scale between 0-10, and ask you about emotions you may have in the image. The scale runs from where 0 to 10, where 0 is not feeling the emotion at all, and 10 is feeling the emotion as much as you could. Could you rate these emotions as you think about the image you have just being thinking of:

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxed</td>
<td></td>
</tr>
<tr>
<td>Happy</td>
<td></td>
</tr>
<tr>
<td>Sad</td>
<td></td>
</tr>
<tr>
<td>Anxious</td>
<td></td>
</tr>
<tr>
<td>Angry</td>
<td></td>
</tr>
<tr>
<td>Humiliated</td>
<td></td>
</tr>
<tr>
<td>Guilt</td>
<td></td>
</tr>
<tr>
<td>Shame</td>
<td></td>
</tr>
<tr>
<td>Disgust</td>
<td></td>
</tr>
</tbody>
</table>

Thinking about the image, how clear is it, on a scale of 0-10, if 0 is not clear at all, and 10 is the most clear it could be?

How vivid is the image, on a scale of 0-10, if 0 is not vivid at all, and 10 is the most vivid it could be?

How controllable is the image, on a scale of 0-10, if 0 is not controllable at all, and 10 is the most controllable it could be?
Appendices

• How real does the image feel in terms of being in the “here and now”. Can you tell me on a scale of 0-10, where 0 is not in the “here and now” at all, and 10 is completely in the “here and now”?

• If you thought about the image for a long time, would it be a bad thing, a neutral thing or good thing?

• How anxious do you feel right at this moment, on a scale of 0-10, if 0 is not anxious at all, and 10 is the most anxious you could feel?

Agoraphobic images

• Now I would like you to open your eyes because I am going to ask you to imagine another situation.

I’d like to talk to you about some of the things that go through your mind when your agoraphobia (anxiety) is bad. Usually when people are very anxious a mixture of thoughts and images and fleeting pictures go through their minds. I’m especially interested in the images you have again and again when you are anxious.

• Do you get the same images again and again when you are in a situation that would make you anxious?

   Yes/No

• How often do you experience images in anxious situations?

   Always=4
   Often=3
   Sometimes=2
   Never=1

• When and where do these images occur?

If and only if the answers are all no:

• Sometimes even if people do not get actual images they still form an impression of a situation of how they are coming across, or how other people might react to them. Do you remember getting that kind of an impression when you are anxious?

(Optional if no images are produced)

I am going to describe a situation that will help you with your imagery, for example, like the beach situation in the relaxation exercise. Would you like to imagine travelling alone by tube, walking alone in a busy street, going into
crowded shops, going alone far from home or large open spaces. I realise that all these situations may be distressing.

(Which one?)

I am going to play the scenario on a tape that will take about 30 seconds, and then I will ask you some questions.

**Scenario 1: Travelling alone by tube**

You are alone. You get on a tube train and cannot get a seat. People are pushing against each other in the aisles and there is no space to breathe. You are feeling hot and then the train stops in a tunnel.

**Scenario 2: Walking alone in busy streets**

You are alone. As you walk down a busy street, you pass lots of people. There are many people carrying shopping and with prams and umbrellas. The sea of people behind you is pushing you forward. There are also people bumping into you as they approach. You start to feel anxious.

**Scenario 3: Going into crowded shops**

You are alone. As you approach the supermarket you can tell it is busy. There are lots of people around the doorway. As you enter the shop, you feel yourself getting hot. You notice that lots of people are looking at you.

**Scenario 4: Going alone far from home**

You are alone. You are in the middle of a street that you do not recognise and home is a long way away. You realise that it is going to take a long time to get home, and no one can help you. You start to notice that your breathing has speeded up.

**Scenario 5: Large open spaces**

You are alone in a large expanse of space. You cannot see anyone for miles. No one could help you if something went wrong. You notice that your breathing has started to speed up.

Could you close your eyes and recreate one of those images (or impressions) now, making it as vivid as possible, so that a film director might be able to recreate the scene?

Have you got it now?

- Can you see anything in the image? Describe.
- Can you hear anything? Apart from your own voice?
- What about taste or smell?

- What physical sensations do you have in your body?

I am going to show you a scale between 0-10, and ask you about physical sensations you may have in the image. The scale runs from where 0 to 10, where 0 is not feeling the sensation at all, and 10 is feeling the sensation as much as you could. Could you rate these sensations as you think about the image you have just being thinking of:

<table>
<thead>
<tr>
<th>Sensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart palpitations</td>
</tr>
<tr>
<td>Pressure in chest</td>
</tr>
<tr>
<td>Numbness in arms of legs</td>
</tr>
<tr>
<td>Feeling short of breath</td>
</tr>
<tr>
<td>Blurred/distorted vision</td>
</tr>
<tr>
<td>Nausea</td>
</tr>
<tr>
<td>Lump in throat</td>
</tr>
<tr>
<td>Wobbly legs</td>
</tr>
<tr>
<td>Sweating</td>
</tr>
<tr>
<td>Dry throat</td>
</tr>
<tr>
<td>Feeling disoriented</td>
</tr>
<tr>
<td>Feeling disconnected from your body</td>
</tr>
</tbody>
</table>

- Is anyone else in the image?

- Can you feel anything, as in touch?

- Can you tell me if there are any thoughts running thought your mind?

I am going to show you a scale between 0-10, and ask you about thoughts you may have in the image. The scale runs from where 0 to 10, where 0 is not feeling the thought at all, and 10 is feeling the thought as much as you could. Could you rate these thoughts as you think about the image you have just being thinking of:

<table>
<thead>
<tr>
<th>Thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am going to throw up</td>
</tr>
<tr>
<td>I am going to pass out</td>
</tr>
<tr>
<td>I must have a brain tumour</td>
</tr>
<tr>
<td>I will have a heart attack</td>
</tr>
</tbody>
</table>
I will choke to death
I am going to act foolishly
I am going blind
I will not be able to control myself
I will hurt someone
I am going to have a stroke
I am going crazy
I am going to scream
I am going to babble and talk funny
I will be paralysed with fear

- Thinking about the image you have just had, is your predominant impression one of viewing the situation as if looking out your eyes. Or is your impression observing yourself, which is, as if you were outside of yourself, looking at yourself from an external point of view. I am going to show you a rating scale of between -3 and +3. At this end (minus end), -3 represents seeing the scene entirely through your eyes, and +3 represents observing yourself as though through an external point of view. Where would you be on the scale?
(Scale 1)

- How do you feel in the image? (list emotions cited)

I am going to show you a scale between 0-10, and ask you about emotions you may have in the image. The scale runs from where 0 to 10, where 0 is not feeling the emotion at all, and 10 is feeling the emotion as much as you could. Could you rate these emotions as you think about the image you have just being thinking of:

<table>
<thead>
<tr>
<th>Relaxed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy</td>
<td></td>
</tr>
<tr>
<td>Sad</td>
<td></td>
</tr>
<tr>
<td>Anxious</td>
<td></td>
</tr>
<tr>
<td>Angry</td>
<td></td>
</tr>
<tr>
<td>Humiliated</td>
<td></td>
</tr>
<tr>
<td>Guilt</td>
<td></td>
</tr>
<tr>
<td>Shame</td>
<td></td>
</tr>
<tr>
<td>Disgust</td>
<td></td>
</tr>
</tbody>
</table>

- Thinking about the image, how clear is it, on a scale of 0-10, if 0 is not clear at all, and 10 is the most clear it could be?
• How vivid is the image, on a scale of 0-10, if 0 is not vivid at all, and 10 is the most vivid it could be?

• How controllable is the image, on a scale of 0-10, if 0 is not controllable at all, and 10 is the most controllable it could be?

• How real does the image feel in terms of being in the “here and now”. Can you tell me on a scale of 0-10, where 0 is not in the “here and now” at all, and 10 is completely in the “here and now”?

• If you thought about the image for a long time, would it be a bad thing, a neutral thing or good thing?

• How anxious do you feel right at this moment, on a scale of 0-10, if 0 is not anxious at all, and 10 is the most anxious you could feel?

Link to Core Beliefs

Can I ask you in more detail about what is happening in the image?

• Why is this happening?

• What has led up to this event?

• What is the worst thing about it?

• Does the image make you want to do anything?

• What does the image mean about you?
What does the image mean about other people?

- What do the images mean about the world in general?

- Do you have any other images that you have again and again when you are anxious?

*(if yes, repeat questions from questionnaire)*

**Link to Memories**

- What is your earliest recollection of having the thoughts/ sensations/ emotions/ experiences reflected in the image (or impression)?

- Where were you?

- How old were you?

- What was happening in your life at the time?

- How did you feel about your self at the time?

- Is there a particular memory that seems closely linked to the image?  
  Yes/No

*****ANAGRAM TASK*********
• The memory that you were thinking of before we did the last task. Do you think you could evoke it with your eyes closed, just as if it was happening now? Could you describe it to me now?

• Can you see anything in the memory?

• Can you hear anything? Including your own voice?

• What about taste, smell?

• What about taste or smell?

• What physical sensations do you have in your body?

I am going to show you a scale between 0-10, and ask you about physical sensations you may have in the memory. The scale runs from where 0 to 10, where 0 is not feeling the sensation at all, and 10 is feeling the sensation as much as you could. Could you rate these sensations as you think about the memory you have just being thinking of:

<table>
<thead>
<tr>
<th>Physical Sensations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart palpitations</td>
</tr>
<tr>
<td>Pressure in chest</td>
</tr>
<tr>
<td>Numbness in arms of legs</td>
</tr>
<tr>
<td>Feeling short of breath</td>
</tr>
<tr>
<td>Blurred/distorted vision</td>
</tr>
<tr>
<td>Nausea</td>
</tr>
<tr>
<td>Lump in throat</td>
</tr>
<tr>
<td>Wobbly legs</td>
</tr>
<tr>
<td>Sweating</td>
</tr>
<tr>
<td>Dry throat</td>
</tr>
<tr>
<td>Feeling disoriented</td>
</tr>
<tr>
<td>Feeling disconnected from your body</td>
</tr>
</tbody>
</table>
• Is anyone else in the memory?

• Can you feel anything, as in touch?

• Can you tell me if there are any thoughts running through your mind?

I am going to show you a scale between 0-10, and ask you about thoughts you may have in the memory. The scale runs from where 0 to 10, where 0 is not feeling the thought at all, and 10 is feeling the thought as much as you could. Could you rate these thoughts as you think about the memory you have just been thinking of:

<table>
<thead>
<tr>
<th>Thought</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am going to throw up</td>
<td></td>
</tr>
<tr>
<td>I am going to pass out</td>
<td></td>
</tr>
<tr>
<td>I must have a brain tumour</td>
<td></td>
</tr>
<tr>
<td>I will have a heart attack</td>
<td></td>
</tr>
<tr>
<td>I will choke to death</td>
<td></td>
</tr>
<tr>
<td>I am going to act foolishly</td>
<td></td>
</tr>
<tr>
<td>I am going blind</td>
<td></td>
</tr>
<tr>
<td>I will not be able to control myself</td>
<td></td>
</tr>
<tr>
<td>I will hurt someone</td>
<td></td>
</tr>
<tr>
<td>I am going to have a stroke</td>
<td></td>
</tr>
<tr>
<td>I am going crazy</td>
<td></td>
</tr>
<tr>
<td>I am going to scream</td>
<td></td>
</tr>
<tr>
<td>I am going to babble and talk funny</td>
<td></td>
</tr>
<tr>
<td>I will be paralysed with fear</td>
<td></td>
</tr>
</tbody>
</table>

• Thinking about the memory you have just had, is your predominant impression one of viewing the situation as if looking out your eyes. Or is your impression observing yourself, which is, as if you were outside of yourself, looking at yourself from an external point of view. I am going to show you a rating scale of between -3 and +3. At this end (minus end), -3 represents seeing the scene entirely through your eyes, and +3 represents observing yourself as though through an external point of view. Where would you be on the scale?

(Scale 1)

• How do you feel in the memory? (list emotions cited)
I am going to show you a scale between 0-10, and ask you about emotions you may have in the memory. The scale runs from where 0 to 10, where 0 is not feeling the emotion at all, and 10 is feeling the emotion as much as you could. Could you rate these emotions as you think about the memory you have just being thinking of:

<table>
<thead>
<tr>
<th>Emotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxed</td>
</tr>
<tr>
<td>Happy</td>
</tr>
<tr>
<td>Sad</td>
</tr>
<tr>
<td>Anxious</td>
</tr>
<tr>
<td>Angry</td>
</tr>
<tr>
<td>Humiliated</td>
</tr>
<tr>
<td>Guilt</td>
</tr>
<tr>
<td>Shame</td>
</tr>
<tr>
<td>Disgust</td>
</tr>
</tbody>
</table>

- Thinking about the memory, how clear is it, on a scale of 0-10, if 0 is not clear at all, and 10 is the most clear it could be?

- How vivid is the memory, on a scale of 0-10, if 0 is not vivid at all, and 10 is the most vivid it could be?

- How controllable is the memory, on a scale of 0-10, if 0 is not controllable at all, and 10 is the most controllable it could be?

- How real does the memory feel in terms of being in the “here and now”. Can you tell me on a scale of 0-10, where 0 is not in the “here and now” at all, and 10 is completely in the “here and now”?

- If you thought about the memory for a long time, would it be a bad thing, a neutral thing or good thing?

- How anxious do you feel right at this moment, on a scale of 0-10, if 0 is not anxious at all, and 10 is the most anxious you could feel?
• Can I ask you in more detail about what is happening in the memory?

• Why is this happening?

• What has led up to this event?

• What is the worst thing about it?

• Does the memory make you want to do anything?

• What does the memory mean about you?

• What does the memory mean about other people?

• What does memory mean about the world in general?

Link between image and memory

• How similar is this memory and image, on a scale of 0-10 where 10 is exactly the same, and 0 is not similar at all.

• Is the memory similar to the image in sensory content? Could you tell me on a scale, where 0 is not similar in sensory content at all, and 10 is exactly the same in sensory content?

• Is the image similar to the image in terms of emotions felt? Could you tell me on a scale, where 0 is not similar in emotional content at all, and 10 is exactly the same in emotional content?
• Is the memory similar to the image in the sensation you felt in the body? Could you tell me on a scale, where 0 is not similar in body sensations at all, and 10 is exactly the same in body sensations?

• Is the image similar to the image in terms of your relationship towards people? Could you tell me on a scale, where 0 is not similar in your relationship towards people at all, and 10 is exactly the same in your relationship towards people?

• Have you thought about the similarity of the image and past memory before?
  Yes/No

• Were you anxious in agoraphobic situations before this event?
  Yes/No

• If yes, did the event change this in any way?

• Did it make it better/worse/no different?

• If the event did not lead to anxiety at the time, do you recall it when your anxiety problem started?
  Yes/No

• Do you have any other memories that seem relevant to the image?
  If yes, repeat memory questions

• That is the end of the study. Thank you so much for your time. How are you feeling?
Do you know of any other people that have fears similar to yours that may want to take part in this study?
Scales

(a)

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>As much as it could be</td>
<td></td>
</tr>
</tbody>
</table>
Appendices

7. Content Analysis coding frame
<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
<th>Present /absent in Image</th>
<th>Present /absent in memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipation of mental catastrophe/ danger/ illness</td>
<td>Fear of mental danger e.g. Going mad: eg. going to/ could happen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anticipation of physical catastrophe/ danger/ illness</td>
<td>Fear of physical, verbal danger, going to physically die</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual mental catastrophe/ danger</td>
<td>Actual mental danger/ illness/ fatality/ catastrophe: madness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual physical catastrophe/ danger</td>
<td>Actual danger/ illness/ fatality/ catastrophe: dying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being misunderstood</td>
<td>People not understanding: Feeling not being understood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amplification of senses</td>
<td>Noises louder than usual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distortion of senses</td>
<td>Visual, aural distortion, e.g. no noise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disorientation/ unreality</td>
<td>Confusion, not knowing what is going on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panic.</td>
<td>physical sensations of panic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of control</td>
<td>Panic/ cognitions: Changes to sense of control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear emotions</td>
<td>Feelings of terror, and fright</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overwhelmed</td>
<td>overpower, being surrounded/ looming in/ feeling crowded, closing in; overwhelmed physically</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in/ awareness of time/</td>
<td>Mention of physical time or changes in time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needing to escape/ entrapment/ hiding self/ want to disappear</td>
<td>Escape being difficult, hard, embarrassing Not being able to escape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidation/ lack of assertiveness</td>
<td>Feeling weak: Wanting to do/say things but not being able to: Words to describe intimidation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magical thinking</td>
<td>Predicting bad outcomes as real</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative view of self:</td>
<td>I am or others thought I was: Words suggesting low self esteem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative view of other people/ malevolence/ critical/hostile</td>
<td>In relation to other people, negative things, descriptions cited about how they are.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative view of the world</td>
<td>In relation to the world, description of how it is.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immobility/ frozen: self/others</td>
<td>Not being able to physically move, either self, or object in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of alcohol</td>
<td>Others or self</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack/inability to protect self/ powerful and powerless/ showing protection to others/</td>
<td>Being unsafe. Having to look after self. Not being looked after by carers or self.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forced Isolation</td>
<td>Being alone: Forced to be alone Not being loved or cared for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired isolation</td>
<td>Wanting to be alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social humiliation</td>
<td>Being cause of attention: humiliated; embarrassed, shown up, being aware of other people seeing you; worry and fear of being noticed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambivalence about people/ the world</td>
<td>Being undecided between two points of view</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression Cognitions</td>
<td>Resignation, sadness, hopeless, helpless</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotions cited: list:</td>
<td>Anger, hate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Appendices**
<table>
<thead>
<tr>
<th>Theme</th>
<th>Definition</th>
<th>Present /absent in image</th>
<th>Present /absent In memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanting to hide self/symptom</td>
<td>Wanting to hide self or symptoms.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired isolation</td>
<td>Wanting to be alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanting to disappear</td>
<td>Wanting to disappear.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Become invisible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanting to return home/ to a particular place</td>
<td>Wanting to be at home, or in a safe place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrapment</td>
<td>Being trapped</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanting to escape</td>
<td>Needing to escape.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance of situation/image</td>
<td>Trying not to think about situation, image, emotions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability to protect self</td>
<td>Not being able to look after self: weak, powerless.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of protection by others</td>
<td>Not being looked after by carers or others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendices

Data

8. Summary of transcripts of qualitative data

9. Drawings by two participants with agoraphobia of their imagery
AGORAPHOBIC GROUP

1*Code
Fear images
Walking down the street, lots of traffic. Bus mounting the pavement and going to hit me. Lots of noise. Coming at me. Fear of suffocation. Noise being amplified. Takes seconds. Need to escape. All I see is the bus hitting me, mounting pavement and hitting me. Noise too loud. All around traffic. So loud. Mouth is tasteless.

Worst thing about it?
Everything. It is going to happen.

Beliefs
I am hopeless. It is going to happen to me
Others are don’t know/ dangerous
The world is don’t know/ dangerous

Associated memories
Can you see anything in the memory?

Age 7 in Scotland, people throw money at weddings. Went for the money, all the children piled on top on me. Could not breathe, though I was going die. Couldn’t move. Completely claustrophobic. Could feel the weight crushing me onto the concrete. Face down. 8/9 kids on top. The weight of it.

Worst thing about it?
Not breathing.

Beliefs
I am in the wrong place at wrong time
Others are? / nothing
The world is ?

*2
Fear images
Can you see anything in the image?
Being outside, people shouting being violent towards me. People’s faces coming towards me, abusive, telling me off. No noise, just see the faces. Parents in the images, being abusive. Want to disappear, get way, be left alone.

Worst thing about it?
Embarrassment/ losing control. Letting that person say that to me without rebelling.
Beliefs

I am weak, no confidence. Wish I was stronger.

Others are stronger/horrible.

The world is a horrible place to be. Don’t know why it was created.

Associated memories

Can you see anything in the memory?

Images

Memory

Age 17/18 in house getting ready to go to work. Dad assaulted me. Dad came in drunk, had been drinking all night. He started being abusive to my younger brother. I went in to protect him. Dad threw me across the room. I hit my head on the door knob and was knocked out. Had to get out, had to get my brother out.

Age 7/8, Dad beating up mum, and drinking, being abusive to me and other brothers. Mum running out the house and leaving us there. Brought up around physical abuse. Never happy. Never looking forward to the next day.

Worst thing about it?

I’m ill. Little brother is ill. My dad has made us ill.

Beliefs

I can be strong if defend brother. Anyone is strong if put in that position.

Others can turn, especially when drunk.

The world is a horrible place.

*3

Fear images

Can you see anything in the image?

I am crossing the road and pass out in the middle. My bad luck, drop in the road. Lying there, people over me. I have stopped breathing. All things are in extreme. Cannot see myself, but know it is me. I am lying down. Cars are passing, other people passing. Cannot make out faces. Being rushed to hospital. Making a fool of self. Bad things always happen to me. Feeling anxious. Can’t move. Feeling overpowered. Vulnerable. “Oh my god”.

Worst thing about it?

Horrible. Really horrible. If that happened, how vulnerable, intimidated being like that. Feeling intimidated would prolong the panic. Not pleasant.

Beliefs

I am vulnerable/overpowered by others/intimidated easily.

Others are stronger. Some would help, some would not.

The world: some would help, some would not.

Associated memories

Can you see anything in the memory?

Age 8, my aunt had a funfair, used to travel with them. Everyone used to talk at once. They thought I was spoilt. Cousins didn’t listen, used to stand over me. All tall. Can remember the four oldest cousins standing up against the rides. Two sitting on it, behind me. One either side. Talking loudly. Standing there. Feeling weak, small and intimidated. Parents used to argue. Used to stand over me. Their dad died, didn’t listen to me.

Beliefs

*I cannot speak up for self
*Others are: some listen, some don’t
*The world is: some listen, some don’t.

*4

Fear images

Can you see anything in the image?
Someone shouting. A face, no age. A man, directed at me. Face contains hate.


Worst thing about it?
Not wanting this situation. Suffocating. Unable to surface.

Beliefs

*I am fearful, powerless.
*Others are powerful.
*The world is split between those that are powerful and those powerless

Associated memories

Can you see anything in the memory?
I was bullied for being little. Remember being up against the wall. No one to tell. No one to listen. Felt powerless. At the mercy of others. Not feeling safe. Unable to move.

Age 6/7 on a beach, I was in the sea. Feeling of drowning in the sea. Parents oblivious. Swallowing loads of water, feeling terror. Fear of not being able to get out. No one to help. Physical terror of swallowing salt water. Fear couldn’t get out. I had to do it. Parents did not realise seriousness of situation. Was physically weak. Called a “weed” by PE teachers. Alone.

Worst thing about it?
Feeling out of control/helpless/powerless. Child like.

Beliefs
I am not protected/helpless/weak. As a child had to look after self. No one there for me. Had to take control.
Others are not there to help. I have great difficulty asking for help. If they do not know you need it, cannot give it.
The world is only able to give help if it knows you need it.

*5
Fear images
Can you see anything in the image?
On a tube train and it stops. Trying not to show fear, but being terrified.
Looking at other people’s shoes and feet. Having inner fear. Train stopping.
Carriages closing in around. Seeing myself and how I look. Things closing in on me

Worst thing about it?
No worst thing. If there was water and it got flooded.

Beliefs
I am pathetic, a coward, no need for it.
Others have no feelings at all.
The world is pretty shitty.

Associated memories
Can you see anything in the memory?
Age 22 working in construction. Lowered down into a tunnel 4ft diameter to do some work. Called up and other people went for tea break. Just forgot about me in the tunnel, didn’t think. I couldn’t climb out, felt really afraid. Couldn’t climb out. Really afraid for half an hour. Couldn’t show my fear to anyone, would seem like weakness. Avoided tunnels, and became alcoholic after that.

Worst thing about it?
Got out. Getting trapped. If thought it was on purpose would be much worse.

Beliefs
I am fearful, get scared easily.
Others are fine, they don’t mean harm. Didn’t show malice.
The world: Things happen.

*6
Fear images
Can you see anything in the image?
There is a crowd of people. I am walking through them. They are all looking at me. Can see myself and other people from lots of different angles. All the people bunching in a line. Walking and talking loudly, blurred people.

Worst thing about it?
Being stuck in the middle

Beliefs
I am stuck in the middle, cannot escape.
Others are not letting me escape.
The world: never thought about it.
Memory

Earliest recollection of having experiences in image?
I was mugged 10 years ago. I was walking down the road and there was a bunch of kids. Beat us up. They pushed me and my friend into a stairway, and ordered us to take off our rings and trainers. They got out a knife, tried to have a go. Dislocated several fingers. I was a teenager. Was ballistic (at the time). Drugs. Illegal raves. Didn’t give a damn about anything. I remember their faces. Felt fine about self before. (After incident could not walk through crowds, did not like being outside. Lost trust in people).

Worst thing about it?
Fact it happened. It had been a good night

Beliefs

I: should have hit harder
Others: some are ignorant
The world: some people good, some people bad.

*7

Fear images
(picked scenario 4: going far from home)
Can you see anything in the image?
Grey stone house along a grey street with a view of a desolate landscape. No sign of life, human or animal, just sparse, low vegetation.

Worst thing about it?
Being of no use and value even to myself. Powerless/ineffectual.

Beliefs

I am useless, weak and valueless.
Others are primitive and leading to destruction of our society.
The world is dangerous. Full of influence and control.

Associated memories
Can you see anything in the memory?
Living in family that mostly ignored and delighted in scaring me. Mother at work, dad at war. Recall fear and pain of circumcision and terror of VE party. VE party: grandmother dragged me screaming to large hall with two rows of long tables with many children sat around them. Adults occupied rest of space. Circumcision: green and cream painted strange place surrounded by strangers. Recall crude mask put over face, smell of ether. Great pain after. Threw toy plane at white-coated group.

Worst thing about it?
Being afraid, helpless, trapped, overpowered

Beliefs

I am bad to exist.
Others are dangerous.
The world is a place full of terror.
Fear images

Can you see anything in the image?
Being in a train, not knowing where to sit. Falling asleep and waking up not knowing where I am. Begin to panic, start jumping around a bit. Try and hide self. People talking behind my back wondering, “what’s he jumping around for?” Losing sense of direction.

Worst thing about it?
Someone taking the mickey

Beliefs

I: look ridiculous. I am dancing. I am embarrassing. It is degrading.
Others criticise.
The world is full of individuals who may criticise.

Associated memories

Can you see anything in the memory?
When I was coming back from sisters on train. Went to the door. Fell asleep. Had to go back to Dagenham on own. Man saw me panicky. Was panicky.

When I worked on the lorries, felt panicky in the back of the lorry. Lots of lads around had to hide otherwise they would laugh.

When I was five years old, my father used to come in drunk on a Friday night. My mum would row with him, and throw his dinner under the fireplace saying, “hope this chokes you”. The children were scared, and used to have to go next door to the neighbours to stay the night. Used to try and separate them. Felt fear. It was a scary time. Around this time also remember walking with my parents, and wanting to get home. Needed to be at home alone, wanted to get away.

Worst thing about it?
Being away from home

Beliefs

I am weak.
Others are stronger.
The world is scary.

Fear images

Can you see anything in the image?

Worst thing about it?
Embarrassment

Beliefs

I am idiotic, foolish.
Others: ?
The world: ?
Associated memories
Can you see anything in the memory?
Being at school around the age of 12/13. Feeling so uncomfortable in front of people. Each person had to get up on stage and read a prayer. Can see the hall full of people. Shy when looked at. Used to hate it when it was my turn, would try and have the day off. Felt so embarrassed. So scared of being a fool. Was living with my grandmother. It was during the war. Only saw parents infrequently. Did not feel very confident.
Worst thing about it?
Feeling embarrassed. Shown up in front of others

Beliefs
I am inadequate, lacking in confidence.
Others are braver than me. Not show nerves.
The world is ?

*10
Fear images
Can you see anything in the image?
Alone with the children. Something happens and its my fault.

Beliefs
I am not responsible enough.
Others are more responsible.
The world is full of people who do harm.

Associated memories
Can you see anything in the memory?
I was out shopping and my daughter in law was pregnant. Her shoes hurt, had a blister, so walking home with baby girl. Bus went by, and my heart was pounding. Thought I would faint, and someone would take the baby. If I went into a shop, someone would run off with the baby. Crying. Couldn’t be on own with children since that time.
Worst thing about it? Don’t want responsibility

Beliefs
I am not responsible enough.
Others are more responsible.
The world is full of people who do harm.

*11
Fear images
Can you see anything in the image?
Worst thing about it?
Can’t get out. Can’t see out. If could may see someone coming.
Beliefs
I: cannot be locked in. Same with toilets.
Others not worried about people who have anxiety. People not in a hurry to help.
The world is full of obstacles.

Associated memories
Can you see anything in the memory?
On way to work, train came to a halt. Had to sit on the floor. Was very frightened. Had a mild panic attack. Trying not to let other people see, so look through bag. Wooden flooring. Everyone so calm, her I am freaking out.

Age 9/10 stuck in a lift with cousin. Not nice. In a block of flats. She was pressing all the buttons. I was terrified. Thought she would break the lift, and we would get stuck. The lift was nasty, smelt of urine. When it hit the floor, I shot out. She was laughing all the time. I was so distressed, she knew.
Worst thing about it?
Not being able to escape

Beliefs
I am nervous, get frightened easily.
Others are nasty, moody. People do harm on purpose.
The world is good and bad.

Fear images
Can you see anything in the image?

Also image of going into supermarket. Walk through the door, as go further into the shop, everything closes in. No door at other end. More and more people. People surrounding me. Different voices. Cannot get out. Feeling that I am about to pass out. Never wake up. Will I wake up? Maybe put to death. Breathing faster.
Worst thing about it?
Don’t like self like that. Would like to go through streets. Should not be panicky, should enjoy self.

Beliefs
I am stupid, an idiot.
Others are getting on with daily life, unlike me. May not help.
The world is getting dangerous. No goodness anymore.
Associated memories

*Can you see anything in the memory?*

I was frightened of the dark. Mum and dad used to go out to the pub down the street. Felt frightened. Would wait up by window until saw them coming down the street. Saw the shadows on the curtains. Would look at all the couples that came down the street, hoping it was parents. When it was them, would get into bed without them ever knowing.

*Worst thing about it?*

Being on own

Beliefs

*I am* alone.

*Others* are outside, enjoying selves.

*The world* is dangerous.

---

Fear images

*Can you see anything in the image?*

There are people around, coming towards me. All strangers. Mixture of old and young. Some seem friendly. Wouldn’t trust them. Trying to get home. Get to a certain point, all people in front. Have to turn back. People in my way.

*Worst thing about it?*

Surrounded by people

Beliefs

*I am* useless, hopeless.

*Others* show me up.

*The world* is hateful. I don’t want to be here.

Associated memories

*Can you see anything in the memory?*

I was a lonely child. Parents kept me in. Very attached to my mum. On my first day of school, couldn’t speak English, only my mother’s language, Italian. Sitting there aged 5, alone.

Also, mum used to lock me in my bedroom for not eating. Couldn’t get out. Must be able to get out. Seemed like hours. Banging at the door, wanting to get out. Frightened. Having no control. I was scared on my mum. She was strict.

*Worst thing about it?*

Not being able to escape.

Beliefs

*I am* hopeless, not good enough.

*Others* are better, feel let down by me.

*The world* is ?
Fear images

*Can you see anything in the image?*

Boys in the park. A black man in the park. Looks my way. Silver knife. See murder, guns, rape. The whole of me getting stabbed. The boy has a smooth complexion, slanted eyes, a smirky face. Has a blue night cap on, a reversible nike cap. Cannot see his face. Just aggression. Boys have motorbike chains. Trying to catch up. Me and my niece are not fast enough. Blood and guts in the sandpit.

*Worst thing about it?*

Feeling hopeless

Beliefs

*I am* weak

*Others are* low life

*The world is* sad place

Associated memories

*Can you see anything in the memory?*

Was attacked in park. Did manage to get away.

*Worst thing about it?*

Helpless

*I am* not as bolshy as I thought

*Others are* some are unjust

*The world is* sometimes unjust

*15

Fear images

*Can you see anything in the image?*

Get onto the bus platform. People standing all over the place. I fall onto the floor. Hurt myself. Nothing to hang onto. Someone tries to get me up. They find it difficult. It’s embarrassing. I worry that something might happen to my health. That I may damage myself. Have to be on the floor and wait till someone gets me up. People looking.

*Worst thing about it?*

Hurt myself. Will get worse than before, may become physically disabled

Beliefs

*I am* getting old. Can’t cope. Don’t think I can do things.

*Others:* it is nothing to do with other people.

*The world is* dangerous. World is how it has always been. Hope it does not get worse.

Associated memories

*Can you see anything in the memory?*

I was going to visit someone, and someone tripped me up on the bus. I broke my ankle, it was in plaster. I had to cope at home with young children. It was embarrassing and painful. Had to hop across the road, stopped outside the pub.
Held onto something. A couple laughed at me as they thought I was drunk. Burst into tears. Felt miserable.

**Worst thing about it?**
Trouble it caused. Upheaval. Being a nuisance to people.

**Beliefs**

*I am* going to slip.

*Others:* you can’t expect others to run after you.

*The world:* other people have worse problems.

---

**Fear images**

*Can you see anything in the image?*

Going into a shop. People push past as if I am not there. Cannot breathe. Suffocating. Feel that I am going to die. Try and jump on someone to get help. Try and ask help from someone. Want to run away, get home. People notice, think I am crazy. Some people are scared of me, don’t understand what is happening. Have a panic attack.

**Worst thing about it?**

Me: can’t help myself

---

**Beliefs**

*I am* not a strong person.

*Others* don’t want to know. Don’t care.

*The world:* everyone is materialistic. Don’t care about other people. Have not got the time.

---

**Associated memories**

*Can you see anything in the memory?*

When I was young, not allowed to say things. Children should be seen, not heard. I needed to say things: get things off my chest: I had a point to make. Could not discuss my point of view: children were thought not to make valid points. I was stifled. My Nan was spiteful to my mum. Wanted to stand up for my mum: told to keep my mouth shut.

**Worst thing about it?**

Not allowed to say anything. Thought my Nan was false. Tried to buy her love, I couldn’t. She didn’t love us.

**Beliefs**

*I am* unlovable. My fault.

*Others* are false.

*The world* is very false as well.

---

**Fear images**

*Can you see anything in the image?*

I’m on the bus. Heart is pounding, feel ok. Sit down. Door shuts...”oh my god”.

I am trapped. Cannot get off, feel ill, have a panic attack. No escape. Fear up and down my body. Sitting there, making a fool of myself. Pleading with the
conductor to let me off. Being sick. Pass out. Everyone looking at me, thinking I am mad. Bang and punch my way out. Terrified, lose control. Run up and down the bus.

**Worst thing about it?**
Doors shutting

**Beliefs**

*I am* trapped. Running away from something.

*Others* are judging me. Laughing at me. Not helping me. 

*The world* is separate. I am on my own.

**Associated memories**

**Can you see anything in the memory?**
I was brought up by abusive mother. Used to say I was mad and eccentric. Every day. I was not accepted. My father was an alcoholic and my grandmother was mad. My mother did not love me. Wanted to escape from my mother every day. Felt trapped as a child. Was frightened all the time. Mother used to sit in front of me, and see how many times I would blink in a minute. If I did it too many times: she would throw shoes at me. Used to look through her fingers and say that she knew all my thoughts. Used to go home from school thinking what am I going home to. Used to shake in bed at night. Father was also frightening when he drank. He was out of control.

**Worst thing about it?**
Terror. No break. No where to run

**Beliefs**

*I am* not worthy. Am nothing. There to be abused. 

*Others* are untrustworthy. There are other sides to people. 

*The world* is good and bad, winter and summer, negative and positive.

*18*

**Fear images**

**Can you see anything in the image?**
Walking on the street, frightened going to get attacked by people. Always watching around. On guard all the time. If loads of people, they could see me and attack me. 

In a shop, would have to leave shop and walk out. If too packed, body anxiety. People watching. People thinking I am mad. They do not understand what it is like. Everyone’s looking at you. Mind is blank, want to get out.

**Worst thing about it?**
I am not well. I am going to die in the middle of a shop. Got a boy to look after, got responsibility. Can’t leave him without me.

**Beliefs**

*I: My son needs me, if not I would be worse. Got to put on a brave face. If it messes my mind, how does he feel. Trying to be strong for him. Always feel weak*

*Others: I used to like others, now I don’t know if I can trust them.*

*The world: Hate it. So sorry for the younger generation.*
Associated memories

Can you see anything in the memory?
When aged 10 couldn’t go into closed spaces. Couldn’t go into the confession box. Scared to be locked in. Thought I wasn’t coming out. Watched people coming in and out so thought I must be able to.

Worst thing about it?
Going in and not coming out.

Beliefs

I am: memory doesn’t mean anything. It is something everyone went through. I came from a lovely caring family.

Others?
The world?

Fear images

Can you see anything in the image?

Worst thing about it?
End of life.

Beliefs

I am not normal.

Others make me sick.

The world: I am half against the world.

Associated memories

Can you see anything in the memory?
I used to pass out a lot as a child. My dad would pick me up and leave me. Felt ok afterwards.

On a tube train going Christmas shopping. Felt hot. Woke up spitting out my teeth on the floor of the tube. Covered in blood. Man leaning over me. Worried about where my bag was, as my purse was full of my Christmas money. He was nice, gave me my bag. In pain. Rang dad. Was taken to hospital. Dad got me.

Worst thing about it?
Didn’t know what was happening. Was burning the candle at both ends. The state of me. Needed plastic surgery, and teeth changed.

Beliefs

I: was young. Had the best job, was earning money.

Others are lucky. Unfair I had to get it. Not that bad a person.

The world is oblivious to them.
Fear images

Can you see anything in the image?
Sitting in a car. Other cars surrounding the car I am in. Feel I need to push out. Feel self draining, inner dread, going from top (head) to bottom. Being closed in. Legs like jelly, tightness in chest, wobbling, feeling unsteady. Too many people surrounding me.

Also get the feeling and same image when in a restaurant, lift and bath.

Worst thing about it?
Being out of control

Beliefs
I am weak.
Others?
The world?

Associated memories

Can you see anything in the memory?
Brother used to hold my hands, grip my hands really tightly. Wouldn’t let go. Was restricted. Found that hard. When someone restricts you, uncomfortably restricts you. He was 4 years old, a big brother. Only did it in playing, sort of “got you now”.

Worst thing about it?
Restraint

Beliefs
I am not that strong.
Others?
The world?
CONTROL GROUP

*201
Fear images
Can you see anything in the image?
Walking into a hop. People looking and seeing. I’ve got something wrong.
Everyone is looking at me
Worst thing about it?
Everything. Sensations felt.

Beliefs
I: do not feel good about myself. Should feel more good about self than I do. I am nothing.
Others are better.
The world is unfair.

Associated memories
Can you see anything in the memory?
General sensations of self, now and again in every day situations. In first year of university had to present work. Was scared, like presenting myself, judging myself. Frightened.
Worst thing about it?
Repeat forever

Beliefs
I am pretending.
Others as good as I am.
The world is extremely demanding.

*202
Fear images
Can you see anything in the image?
At a wedding reception. Lot of large tables, white tablecloths. In a room, everyone being asked to stand up and make a speech. Table by table.
Worst thing about it?
Not knowing what to say

I: do not like public speaking.
Others: Everyone feels nervous.
The world: We take life too seriously.

Associated memories
Can you see anything in the memory?
Age 22 at a wedding reception. I was best man, due to make a speech. Lots of noise. No one was quiet. Voice couldn’t project. Couldn’t get people’s attention. Tapped glass, glass smashed. Totally dried. Forgot what I was going to say.
Worst thing about it?
Having to talk
I am no good at public speaking.
Others are the same.
The world ?.

Control gp:
*203

Fear images
Can you see anything in the image?
Walking down the street in Brixton. Busy time, trying to get on buses, trying to get to the tube.
Worst thing about it?
Not unfounded fear. Have being mugged.

I: feel unsafe in Brixton.
Others can make you feel unsafe.
The world: People are generally good, but some do steal things and take drugs

Associated memories
Can you see anything in the memory?
Three years ago followed home at night. Walking home. Fell over but carried on. Up my drive, footsteps behind me. Turned around and guy at bottom of stairs, following up the steps. Had his penis in his hand, masturbating.
Worst thing about it?
Reminds me how vulnerable you can be.

I am no more vulnerable than anyone else.
Others ?
The world ?

*204

Fear images
Can you see anything in the image?
Spot on nose. Everyone looking. In a check out queue. Everyone looking including check out person.
Worst thing about it?
People looking at me

I am superficial.
Others are bastards, nothing.
The world is hung up on small things.

Associated memories
Can you see anything in the memory?
Worst thing about it?
Stopped me doing things

I: was a self conscious teenager.
Others grow up different
The world?

*205
Fear images
Can you see anything in the image?
On tube. It stops. Hot, cannot breathe. How long will this last. What if run out of oxygen? Wonder if someone will flip out? How long can I stand it?
Worst thing about it?
Being trapped

I am quite normal. Tubes are horrible.
Others: does not mean anything.
The world: there are some situations that are uncomfortable.

Associated memories
Can you see anything in the memory?
Few months ago, after Sept. 11th, lot of bomb scares on the tube. Constantly closing tube stations. Heard about a Victoria line train getting stuck, and people passing out. I use Victoria line. About one week after this incident, on tube and it stopped in a tunnel. Hot. Kept thinking, this is not going to happen again. It is so hot. Focused on keeping calm, fanned self.
Worst thing about it?
Helplessness/ trapped

I am able to keep calm under difficult situations. Coped quite well.
Others: doesn’t mean anything.
The world: doesn’t mean anything.

*206
Fear images
Can you see anything in the image?
Wonder how long the tube is going to take.

Beliefs
I am like everyone. Mostly can handle it.
Others are probably feeling the same. Variation in how people react, cannot always control it.
The world is everyone hates stuck tubes.

Associated memories
Can you see anything in the memory?
When I was first working. Had a long tube ride. It used to get stuck. Would worry about needing the loo. Remember being on the tube, looking at the tube
doors. “I’m going to make a fool of myself”. Sense of being out of control of body.

**Beliefs**

*I am.* At time, stressful job. Anxious going into work. Anxiety was a typical reaction to that. Felt out of control of a lot of things. Things better now, a symptom of other anxiety.

*Other are* no. At time self conscious, thought people harshly judged.

*The world is* only my world in general. I am more content now.

---

**Fear images**

*Can you see anything in the image?*


*Worst thing about it?*

Aloneness

**Beliefs**

*I am* afraid of being alone, vulnerable.

*Others* are vulnerable. If anyone felt like that, would feel vulnerable.

*The world:* doesn’t mean anything.

---

**Associated memories**

*Can you see anything in the memory?*

Age 5. Lost in a market place in Hong Kong. Can see lots of people I don’t know.

*Worst thing about it?*

Humiliation

**Beliefs**

*I am* uncared for.

*Others* are uncaring.

*The world:* can be uncaring.

---

**Fear images**

*Can you see anything in the image?*


*Worst thing about it?*

Not being able to escape

**Beliefs**

*I am* aggressive.

*Others* are stupid.

*The world:* London is a bad place.
Associated memories

*Can you see anything in the memory?*
This week in Oxford Street. No earlier memories. Coming out of Boots.
Thought I do not really want to be here. Heaving with people. Thought I could be on the canal.

*Worst thing about it?*
Not being able to escape

Beliefs
*I am* aggressive.
*Others* are stupid and mill around.
*The world:* London is a bad place.

*209:
Fear images

*Can you see anything in the image?*
Walking by perfume counter. Loads of bags. Everyone in the way, pushing.
Letting people through. Need to push. Being sarcastic, “yes, after you. I’ve got all day”. Makes me feel better.

*Worst thing about it?*
Cross with myself for getting cross

Beliefs
*I am* not very patient.
*Others* are in my way.
*The world:* can be a struggle. Tests you.

Associated memories

*Can you see anything in the memory?*
Horse riding at a show. Not being able to find the ring to take the horse too.

*Worst thing about it?*
Felt bad. Felt I had done something wrong.

Beliefs
*I am* unfairly treated.
*Others:* some people are shit and violent.
*The world* is unfair.

*210
Fear images

*Can you see anything in the image?*
In a busy clothes shop during the Sales. Very busy. People everywhere looking at clothes. Long queues for the changing room and till. Lots of people in the way of the door.

*Worst thing about it?*
Not being able to calm down
Beliefs

I: do not like crowded shops.

Others are ok in crowded shops.

The world: too many people go to the sales.

Associated memories

Can you see anything in the memory?
In an undercover market, aged 4. I was holding my mum’s hand, then she wasn’t there. Can see lots of people, shops, stalls. No sign of my mum.

Worst thing about it?
Being on my own

Beliefs

I: like to feel safe.

Others are helpful when you are lost.

The world: gets on with its own business.

*211

Fear images

Can you see anything in the image?
In busy shop. Bracing myself for someone to take liberties. Taking my space. The inevitable conflict. People behaving like arseholes, like a herd of sheep. Ignorant little creatures. Pushing you, landing on your toes all in a mission to fill the basket.

Worst thing about it?
Being odd one out

Beliefs

I assume the worse about that situation..

Others are bad in that situation.

The world is full of people who mill like insects.

Associated memories

Can you see anything in the memory?
Being lost in a department store. Age 4. In a toyshop. No sign of my mother. Start running to find her. Knew I would get in trouble for being lost. Toys lost their interest. All focus on spotting her.

Worst thing about it?
I was terrified of her punishment. Looking back as an adult, I didn’t do anything wrong.

Beliefs

I: was terrified of her.

Others: some people are emotionally disturbed.

The world: Lots of people demand too much of kids.
Fear images

Can you see anything in the image?

Worst thing about it?
Not being safe. Fear of being attacked.

Beliefs

I am scared outside at night.
Others: some are dangerous.
The world is not safe at night.

Associated memories

Can you see anything in the memory?
Two girls attacked me when I got off the bus. Arms around my neck. Couldn’t breathe. Pushed me into brown hoarding. Neck in a hold. Said, “give me your money”. Other girl seemed drugged. My bag was on the side, but as I was getting pushed, the other one couldn’t reach it. Chap went by, and did not do anything. Started calling loudly, eventually girls ran off. They had not touched the bag. Frozen. In shock.

Worst thing about it?
Who could do that to someone else?

Beliefs

I am nervous at night. Aware when someone is behind me.
Others: It depressed me. I was very lucky.
The world: Doesn’t mean anything.
Worst thing about it?
Hot

Beliefs
*I am* panicky in shops.
*Others*: doesn’t mean anything.
*The world*: doesn’t mean anything.

*214*

Fear images
*Can you see anything in the image?*
Feeling ill in a crowded shop. Want to get away, but people milling around, not moving. Want to get home to be ill in private. Don’t want to attract attention.

Worst thing about it?
Being away from home. Can cope better at home

Beliefs
*I am* independent to a fault.
*Others* are not as nice as I thought they formerly were.
*The world* is not as nice as it used to be.

Associated memories
*Can you see anything in the memory?*
Time in a shop, did feel ill. People never used to worry me. Like mixing with people. But wanted to get home.

Beliefs
*I am* independent.
*Others* are not as nice as I thought.
*The world* is not as nice as I thought.

*215*

Fear images
*Can you see anything in the image?*

Worst thing about it?
Being trapped

Beliefs
*I do not like situations can’t get out of*. Not being able to control my reaction.
*Others* pressure you in difficult situations.
*The world* is too pushy/ in too much of a rush.

Associated memories
*Can you see anything in the memory?*
Working as an airhostess, told there would be an emergency landing. Had to prepare all passengers for the event. Everyone in the crash position. We had to sit down, strapped in. Praying. Thought we would die.
Worst thing about it?
Fear and panic

Beliefs
I did cope at the time. Went to pieces afterwards.
Others are impressive in difficult situations.
The world is unpredictable. Never sure what is going to happen.

*216
Fear images
Can you see anything in the image?
Walking down a busy street. Thinking about pickpockets. Wish I was in a quieter place. Don’t like busy streets, try and find a quieter street. Not comfortable having people milling.
Worst thing about it?
Might get wallet lifted

Beliefs
I am not very trusting.
Others are not that trustworthy.
The world is hard. Need to be careful or you will lose.

Associated memories
Can you see anything in the memory?
Smashed window.
Worst thing about it?
Laptop stolen

Beliefs
I am not very trusting.
Others are not that trustworthy.
The world is hard.

*217
Fear images
Can you see anything in the image?
Being stuck in the tube. Panicky. Oh my god. Don’t like this. All people looking at each other, shuffling about, wondering what is going on.
Worst thing about it?
Not knowing how long stuck there feeling panicky.

Beliefs
I do not like being stuck on a tube.
Others are probably in same boat.
The world: everyone is in it together.
Associated memories

**Can you see anything in the memory?**
Used to go to a park, fair. Was young. Thought I would get stuck in a ghost tube. Was so relieved when went out the other side. When goes through doors, thought it would get stuck.

**Worst thing about it?**
Being frightened

**Beliefs**

*I* doesn’t mean anything.

*Others* doesn’t mean anything.

*The world* doesn’t mean anything.

---

Fear images

**Can you see anything in the image?**
Feel frightened. Losing control. On the tube. All these bodies near me.

**Worst thing about it?**
Being on my own

**Beliefs**

*I* could control self in that situation.

*Others:* doesn’t mean anything.

*The world* doesn’t mean anything.

---

Associated memories

**Can you see anything in the memory?**

**Worst thing about it?**
Isolation

**Beliefs**

*I* need people.

*Others* are mostly kind, nice people.

*The world* is ok.

---

Fear images

**Can you see anything in the image?**
Going into a crowded shop. Hot, sweaty. Walk about. Lots of people around. Would normally walk out. Get irritated. Trying not to bump into anyone. Worse because the summer.

**Worst thing about it?**
The aggravation it causes

**Beliefs**

*I* am not able to handle hot, crowded shops.

*Others* are able to handle situations like that.
The world is getting overcrowded.

Associated memories
Can you see anything in the memory?
I was in Reading. Shop was so crowded. Young lady tried to walk though a glass door thinking it was open. I was near by. Gave her first aid. It was such a hot day. She fainted. There was a fire brigade near by.

Anxious about the girl
Worst thing about it?
The crowd. Hot crowded day.

Beliefs
I am able to deal with difficult situations. I do not panic.
Others do not look where they are going.
The world: doesn’t mean anything.

Fear images
Can you see anything in the image?
In a shop, lots of people. Cannot get out. Want to go home

Beliefs
I am do not like crowds
Other are?
The world is?

Associated memories
Can you see anything in the memory?
At big concert, at the end. Disorientated. Not knowing where I was. “out of myself”. Doesn’t feel like me. Felt lost. Couldn’t feel where I was. Got in a cab, thought the cab was kidnapping me. Trying to tell him where I live. Out of it. Heart, feeling short of breath, sweating. Clinging onto to daughter. Where am I?

Worst thing about it?
Not knowing where I was

Beliefs
I am panicky in crowds
Other are don’t know
The world: don’t know
9. Drawings of participants imagery
ORIGINAL HAS PURPOSE/SUNLIGHT
FLAT WASH ALL OVER

HOPE/FAITH UNNE. HEAVEN/PURPOSE/FLAME

BELONGING UNITY/BELOONG IN NATURE LIGHTS/CRAZE

PAIN/HARDSHIP/NOT ACCEPTABLE WILL TO SURVIVE/SCIENCE BEFORE SACRIFICE

FOUNDATION/IDENTITY/AURORA CARE FULLY SELF OETERS

NOT WASTE HUMAN SUBSTANCES LIFE FOR SELF SACRIFICE

ACCEPTANCE/RESPECT DESIRE TO BE WORTHY APPRECIATED
The Room
Starts off
Big Then
Gets Smaller
And Smaller
Till i can't
Stand it any
More
And all i can't
See is everyone
Leering at me
There are cutting
Into me
The tiger birth in
Master of my fate.