

Imagery Rescripting Therapy: identifying factors associated with successful outcome  
in PTSD

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## **Abstract**

Imagery rescripting (ImRs) is a psychological intervention effective in treating intrusive images in PTSD. Studies have suggested factors in ImRs which may influence outcome; however, research is still in its infancy, with mechanisms of action still unknown and factors which make it successful unclear (Arntz, 2012). This study aimed to investigate therapists' experience of the process of delivering ImRs in PTSD and what they believe make it an effective intervention.

The study used a Grounded Theory (GT) approach to investigate eight therapists' experience of using ImRs in PTSD, and their view of what makes it successful.

A GT analysis produced a model illustrating the process of using ImRs, consisting of four theoretical themes: using ImRs in PTSD, facing obstacles in working with the imagination, identifying the mechanisms of action and moving from the unknown to the known. The main suggested mechanisms of action involved re-establishing power and enabling an emotional shift to occur. The model highlighted inter-relationships existing, with distinct themes feeding into each other.

The GT model suggested more structure and research is required for an increased understanding in ImRs, allowing therapists to feel more confident and comfortable using the perceived anxiety-provoking technique. Future research could focus on interesting findings from this study allowing an already powerful therapeutic tool to develop and become a more widely-used and prioritised treatment technique in PTSD.

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## **Overview of the study**

Imagery techniques have been used all over the world to help alter cognitive processes for centuries (Edwards, 2007). Recently, psychological interventions have begun to adopt imagery interventions, namely within a Cognitive Behavioural Therapy (CBT) framework. As a result, a therapeutic technique known as Imagery Rescripting (ImRs) has been developed and is now being used to treat people with various disorders, including Post-Traumatic Stress Disorder (PTSD). Research into ImRs, although still in its infancy, has shown very promising results in a number of recent studies (see Arntz, 2012, for review). However, despite the growing interest in this technique, there exists only a partial understanding of how it works and what accounts for its effectiveness. No study has yet investigated the therapists' experience of delivering ImRs techniques and what they believe make it an effective intervention.

This study investigated eight Clinical Psychologists' experience of the process of delivering ImRs in PTSD using a Grounded Theory (GT) approach and what they believed made it an effective intervention.

## Literature Overview

### Imagery

Images are an important part of human life and one of the earliest ways we make sense of the world. Humans use images to learn about themselves, others and the environment long before being able to communicate through words (Plummer, 2007). In reality, imagery is more than just visual images, but can involve multiple sensory modalities, including auditory and olfactory, and bodily sensations and feelings (Holmes & Mathews, 2010). Imagery can have much stronger emotional effects than verbal processing. In addition, imagery has been shown to have an effect comparable to a real stimulus, in both psychological and brain responses (Holmes & Mathews, 2010).

Imagery techniques have been used internationally to alter cognitive processes for centuries, with techniques ranging from shamanic healing, to dream incubation methods by the Egyptians, to meditative visualisation by Tibetan Buddhists, to hypnotherapy (Edwards, 2007). One early form of imagery work was developed by a French physician called Pierre Janet (1919). Janet's 'imagery substitution' work involved replacing one image with another in hysterical patients. Although this work was largely ignored, the use of imagery was later revived through gestalt methods and later integrated into more modern day cognitive therapies, such as imagery exposure therapy (Edwards, 2007). Imaginal exposure (IE), also known as 'reliving', is used to bring as much of a memory to conscious awareness as possible, including any sensory feelings, thoughts and emotions. This technique works through reducing fear and avoidance by loosening the associations between the unconditioned and conditioned stimulus through habituation (Foa et al., 1999). Consequently, there have been a number of studies showing the effectiveness of IE as a standalone treatment for PTSD (Foa, Molnar, & Cashman, 1995; Jaycox, Foa, & Morral, 1998) and as a result it is now a central part of treatment for PTSD. However, many researchers and clinicians acknowledge that although IE treatment is effective, not everyone benefits from the intervention. For



example, Foa, Rothbaum, Riggs and Murdock (1991) discovered 45% of patients continued to meet diagnostic criteria for PTSD following an IE intervention. Furthermore, Tarrier et al. (1999) reported 31% of patients actually experienced an increase in PTSD symptoms after a course of IE treatment. Although this has been contested by some (e.g. Devilly & Foa, 2001), it suggests that sometimes repeatedly re-invoking highly distressing traumatic events may not always be beneficial and could be too distressing for some. In addition, these studies suggest some factors present in PTSD may not be addressed solely through IE (Hackmann, Ehlers, Speckens & Clark, 2004). As such, additional ways of working with images were developed, such as the technique ‘Imagery Rescripting’, on which this study will focus.

### **Imagery Rescripting**

Imagery rescripting (ImRs) therapy is a psychological intervention which aims to ‘rescript’ a memory. It is usually incorporated into a cognitive behavioural therapy (CBT) approach, either supporting other CBT interventions or used as a standalone treatment (Smucker, Dancu, Foa, & Niederee, 1995). It works by restructuring an event memory in the imagination to reduce the associated distress; this can include: correcting a distorted image, communicating with the dead, being treated compassionately, being rescued, providing a reassuring presence to the traumatised self, reducing the perception of threat from a past abuser, overcoming aggressors, getting revenge, and humiliating enemies (Arntz, 2012; Hackmann, 2011). The client is said to be given an “artistic licence” to direct the rescript in their desired direction (Wheatley & Hackmann, 2011, p.444). ImRs has been shown to be an effective treatment intervention for many psychological disorders, especially PTSD, which will now be discussed (Arntz, 2012).

### **Post-Traumatic Stress Disorder (PTSD)**

PTSD is defined by the DSM-IV as a disorder in which a person has “experienced or witnessed an event that involved actual or threatened death or serious injury, or a threat to

physical integrity of the self or others” (American Psychiatric Association, 2000). It is characterised by three symptom groups: intrusions (e.g., intrusive images), avoidance (e.g., avoidance of people, places and situations related to the trauma) and arousal (e.g., sleeping difficulties). Most intrusive memories involve sensory images, and events are often experienced as if they are happening now (re-experiencing) and thus carry the same meaning as they had at the time of the event (e.g., “I am going to die”) (Hackmann, 2011). Experiencing ‘hotspots’ is common in PTSD, these are moments of the trauma memory which carry the worst meanings, have the highest levels of emotional distress and are associated with the intense re-experiencing of the trauma (Grey & Holmes, 2008; Hackmann, 2011). A myriad of emotions can be attached to the imagery of a hotspot, including: fear, helplessness, horror, anger, sadness, shame, guilt and disgust (Grey & Holmes, 2008). In addition, hotspots are often not a veridical replay of the actual event, but can be imagined as the worst case scenario peri-traumatically, making it difficult for the individual to differentiate between associated feelings of what was real or not (Grey & Holmes, 2008). The National Institute of Health and Care Excellence (NICE, 2005) guidelines recommend trauma-focused CBT or eye movement desensitisation and reprocessing (EMDR) for treatment of PTSD. Trauma-focused CBT generally involves three different methods: imaginal exposure (IE), cognitive restructuring and/or imagery rescripting, and aims to reduce the reliving symptoms (e.g., nightmares and flashbacks) by reducing the reported distress associated with the intrusive memories.

Poor image control, including nightmares, flashbacks and intrusive memories, is often related to anxiety disorders, especially PTSD (Long et al., 2011). It is therefore no surprise that much of the ImRs research has focused on PTSD, with good effect (Ehlers, Clark, Hackmann, McManus, & Fennell, 2005; Grunert, Smucker, Weis, & Rusch, 2003). Major Clinical Depression can often be a reaction to PTSD, and although the two are distinct diagnoses, current literature suggests they share similar symptomatic characteristics (Brewin, Hunter,

Carroll, & Tata, 1996). For example, Brewin, Reynolds and Tata (1999) discovered that although the events preceding each disorder often differ, the nature - both qualitatively and quantitatively - of the vivid and repetitive intrusive memories were similar. Moreover, such intrusive memories can act as a maintaining factor for depression. As such, ImRs was adapted for use in major depression with good effect (Brewin et al., 2009). Although this research will primarily focus on the effectiveness of ImRs as a treatment for PTSD, intrusive images are a common psychological phenomenon and can act as 'emotional amplifiers' across a wide range of psychopathologies (Stopa, 2011). Consequently, evidence for the effectiveness of ImRs as a trans-diagnostic treatment is growing, in areas such as: personality disorders (Arntz & Weertman, 1999); social phobia (Wild, Hackmann, & Clark, 2007) and eating disorders (Cooper, Todd, & Turner, 2007). Exactly how ImRs is used in practice will now be discussed.

### **ImRs in Practice**

Although no generic protocols exist in ImRs for PTSD, there are several frameworks to using ImRs for different presentations which may be beneficial to discuss prior to outlining the research literature. Smucker et al., (1995) developed an ImRs protocol aimed at treating adult survivors of childhood sexual abuse. The protocol included IE for the first four sessions, then moved on to developing a mastery image of the individual rescuing the child self and forcing out the abuser, and then developing images of the adult-self nurturing the child-self. This process, although at times lengthy, has been shown to be effective in reducing flashbacks and causing a shift in beliefs about the self and others. Arntz and Weertman (1999) developed a similar way of working with the same client group by developing a three-stage model. First, the client imagines the traumatic scene, they then go back as their adult self to imagine this scene as a bystander, then the individual has to intervene in some way (e.g., call the police, attack the abuser) and finally, the adult self asks the child from their perspective if they need anything else in the image, such as comfort. This differs from the Smucker et al. (1995)

protocol by including a perspective from the child, something Hackmann (2011) suggested may cause more affect to be generated and allow new information to be fed directly into early schematic representations. Although ImRs has been adapted in different ways to suit different presentations, protocols for other disorders follow these general principles. The next section will now consider hypotheses on what makes ImRs an effective intervention.

### **The Mechanisms of Action in ImRs**

Research demonstrates that ImRs is an effective treatment for PTSD and other disorders, and although there are various theories which attempt to explain the mechanisms of action in ImRs, the exact theory remains uncertain (Arntz, 2012; Wheatley & Hackmann, 2011). This part will now review current psychological theories attempting to explain PTSD and ImRs.

**Theories of ImRs.** Early theories explaining imagery in PTSD, called ‘information processing’ theories, lay the foundations for research in this area (Litz & Keane, 1989). One example was Foa and Kozak's (1986) ‘Emotional Processing’ theory of fear. This theory posits that anxiety disorders, specifically PTSD, reflect a pathological memory structure based on fear. This fear structure includes pathological cognitions about the world, self and PTSD symptoms. In order for treatment to be effective, one’s fear structure must be activated through repeated reliving of the trauma and emotional engagement. Corrective information for the cognitive distortions is then provided and the original beliefs are modified. This theory was mainly developed to describe the process of IE. It is thought that ImRs goes one step further by enabling a re-evaluation of fear memories by reconsolidating the memory with a different meaning, and therefore no longer activating a powerful fear response (Arntz, 2012).

Ehlers and Clark's (2000) cognitive model of PTSD posits that through faulty processing and poor contextualisation of memories, intrusive memories carry distorted negative appraisals. PTSD is developed and maintained when this faulty processing leads to a continued sense of

current threat. Ehlers and Clark's (2000) model suggests treatment for PTSD works by essentially changing the original memory by accessing the hotspots through IE and updating these meanings with new, more realistic (e.g., "I survived") and less harmful (e.g., "it was not my fault") information. This aims to change the distorted appraisals of the memory, while processing and contextualising the original memory that was once fragmented and easily triggered. With this model in mind, ImRs is said to operate by updating the hotspot meanings by both incorporating corrective information (e.g., I did not die) into the memories through imagery, but also changing the meaning of the memory through ImRs, such as from feeling powerless to feeling powerful. As a result, PTSD symptomology is reduced and distorted beliefs are changed. Arntz (2012) further suggests ImRs may work not solely from changing the emotional meaning of the memory, but by assisting clients to get their unmet needs met or expressing actions that were at the time of the trauma inhibited, something he reported needed further investigation.

Brewin's (2006) 'retrieval competition hypothesis' suggests that psychological techniques working with memories do not directly change memories, but create representations that compete for retrieval. According to this theory, our sense of who we are is created through competing representations of the self, such as representations from our memories. This theory claims that the original memory representation is not changed by ImRs treatment, but a new and more useful representation of the memory is offered (the new script), which has less harmful and more truthful meanings for the client, and thus competes with the original dysfunctional representation striving to 'win' the retrieval advantage. These new competing memories do not have to be entirely accurate, but they have to be more readily available around the same retrieval cues.

Despite these theories helping to understand the process of ImRs, the question remains as to what actually makes a new memory script so meaningful that it either changes the original

memory representation, the emotional meaning of the original memory, or builds a new alternative memory representation. Several studies will now be discussed which suggest factors that may contribute towards making ImRs a successful intervention. As this study is based on PTSD, the literature discussed will mainly focus on ImR for PTSD; however due to the trans-diagnostic nature of both ImRs and intrusive images, studies using different clinical populations will also be discussed when deemed relevant.

**Imagery ability.** Beginning with the most obvious factor when thinking of what makes imagery work successful is the ability to use one's imagination. Hunt and Fenton (2007) tested the effectiveness of ImRs with snake phobic individuals, specifically comparing imagery ability with outcome. The concluding results must be interpreted with caution owing to a non-standardised administration of the imagery ability test, along with using a test not designed to measure imagery ability per se but hypnotic responsiveness. Nonetheless, contrary to expectations, they found there was no main effect of imagery ability and treatment outcome. Although the ability to imagine is a tricky and intangible concept to measure, with a limited number of assessment measures available, this study suggested individual imagery ability may not be so important when investigating what makes ImRs successful.

**Mastery and control.** Research into ImRs and the treatment of PTSD began by Smucker et al. (1995) who developed a treatment protocol for ImRs with victims of childhood sexual abuse. By expanding on the early information processing theories of PTSD (Litz & Keane, 1989) they proposed that the effectiveness of treatment does not simply lie in working with the perceived danger and the physiological reaction, but the meaning ascribed to the situation (e.g., feelings of helplessness). These meanings often accompany the intrusive phenomena, so by rescripting the memory and allowing the individual to gain a sense of mastery and control of the situation and reduce feelings of helplessness, this would in turn reduce PTSD symptoms. This treatment protocol was adapted and applied to a sample of 23 individuals who suffered an industrial accident and met criteria for PTSD but had failed to

respond to IE therapy (Grunert et al., 2003; Grunert, Weis, Smucker, & Christianson, 2007). In addition, all were experiencing non-fear emotions (e.g., guilt, shame, anger), with 14 experiencing anger and four experiencing guilt as their main PTSD-related emotion. The treatment was administered in three phases 1) IE, 2) developing a current positive survivor image which can help the traumatised self to cope and process the accident and the after effects, and 3) post imagery re-processing, which involved further verbal processing, reinforcing the images and daily listening of an audio recording. Following an ImRs intervention, 18 of the 23 individuals made a complete and sustained recovery from PTSD. Although the non-fear emotions were not measured, this study suggests that ImRs may be a more effective intervention in treating non-fear emotions in PTSD, compared with the simple habituation treatment model of IE. Furthermore, in allowing the individual to take charge of the rescript direction, this may have resulted in the individual feeling a sense of mastery and self-empowerment within this study. These results cannot be generalised due to a small sample size (n=23) and a specific cause of PTSD (industrial accident) with the predominant non-fear emotion being anger. Nonetheless, it points to an interesting idea that gaining a sense of mastery and empowerment may be a factor linked to successful outcome in ImRs.

On a similar note, Arntz, Tiesema and Kindt (2007) compared the effectiveness of IE to a combination of IE+ImRs with a sample of 67 chronic PTSD patients in a randomised control trial. The IE+ImRs treatment arm consisted of three initial IE sessions, and then the participant developed an image of how they would have liked to have responded in the worst moment in the later sessions. Although no significant differences were discovered between treatments in the reduction of PTSD symptomology, ImRs was more effective for anger control, externalisation of anger, hostility and guilt. The authors hypothesised that by expressing anger through fantasy in ImRs, individuals gained an increased feeling of control over anger, which reduced anger and hostility overall, and contrary to thought, reduced feelings of guilt. This suggests that expressing anger in a controlled manner through ImRs

may contribute to a more successful outcome in ImRs. As there was no significant difference between the two treatment conditions (IE vs. IE+ImRs) in reducing PTSD symptoms compared to the wait list controls, this implied the addition of ImRs to IE did not enhance the effectiveness of IE. Although this study did look at a wide range of traumas compared to the previous study, and they did use a control group, the sample size was small and the education levels were low, with none having completed university. However, studies show that high IQ may be a protective factor in developing PTSD, so this sample may not be as skewed as first sight would suggest (Breslau, Lucia, & Alvarado, 2006). Even so, the IE+ImRs group had significantly less dropouts than just IE (25% vs. 51%). Despite the limitations, therapists reported that they preferred adding ImRs to IE rather than using IE as a standalone treatment as they experienced less distress and helplessness. This is supported by Hunt et al. (2006) who developed an ImRs intervention to target snake phobia. When compared to an exposure group, ImRs was not only more effective, it was also reported to be less aversive. These are interesting findings when considering what makes ImRs successful, suggesting that ImRs may give both the patient and the therapist a greater sense of control in the situation and feel less distress, thereby adding to its effectiveness.

Long et al. (2011) investigated the effectiveness of ImRs in treating post-traumatic nightmares in 37 veterans. They found a reduction in PTSD symptoms over time, but additionally found that a decrease in perception of incompetence (as measured by the Post Traumatic Cognitions Inventory - self construct) had the strongest relationship with PTSD symptom reduction. Although, again this was a small sample (n=19) and only focused on nightmares, it suggests ImRs may influence negative beliefs about self-ability, and more specifically ability to control distressing images, which may lead to a more successful outcome in ImRs. However, this was not a cause and effect relationship, therefore the reduction in PTSD symptoms may have had an effect on self-beliefs than vice versa. In



addition, similar to other studies, it used a combination of therapeutic components (e.g., IE and ImRs) which made it difficult to tease out the unique effects of ImRs.

In summary, previous research suggests that gaining control and a sense of mastery in ImRs may lead to a more successful treatment outcome, however, further potential factors will now be discussed.

**Compassion.** Wild et al. (2007) investigated an ImRs intervention with a sample of 14 patients with social phobia. Although a small and exploratory study, after using a combination of IE, cognitive restructuring and ImRs, significant change was seen in both social anxiety symptoms, but also in image and memory distress and vividness. The authors reported that the ImRs typically involved the individual entering scenes of the distressing memory as an empowered adult and experiencing compassion and nurturance for the younger person. Even though this study used a sample of participants with social phobia not PTSD, Hackmann (2005) proposed that using this type of imagery can help reevaluate their behaviour and the behaviour of others, reducing their felt sense of threat. A successful rescript may allow the individual to see the event/memory more clearly from another perspective, feeling more compassion for their younger self, or seeing other people's intentions as less harmful as previously imagined. This may be another factor potentially leading to a more successful rescript.

**Humour and positive affect rescripting.** Rusch et al. (2000) used ImRs to treat 11 individuals experiencing distressing spontaneous intrusive images that were not memories of actual traumatic events, for example one participant sustained a hand injury at work and subsequently developed intrusive images of his children and neighbours being injured by lawnmowers. These individuals had been unresponsive to IE. The study discovered that ImRs was effective in reducing the frequency and emotional impact of the images. Interestingly, most individuals used humorous or absurd images as a replacement. For example, one

participant instead of imagining falling to the floor and cracking his bones, imagined turning into Tigger from *Winnie the Pooh* and bouncing off the floor as if on springs, which completely reduced the distress. The authors hypothesised that these new humorous images may have caused an increase in positive affect. This increase enabled the individual to repeat the new image with pleasure, thus reinforcing it in their mind, and consequently reducing anxiety. This positive reaction may also inhibit the negative arousal associated with the original images. In addition, being able to control such images may have led to an increase in positive affect, which in turn had an effect on their perception of their more controllable mental state and the images, seeing the original image as a slight annoyance rather than anything more serious. Hackmann and Holmes (2004) suggest that replacing negative imagery with positive images enhances the individual's ability to imagine positive images and cognitions related to the future (e.g., plans, goals and future experiences). Furthermore, some have claimed imagery is far more effective in evoking a positive mood than verbal directions (Holmes, Mathews, Dalgleish, & Mackintosh, 2006). However, there were limitations to the Rush et al. (2000) study, such as a small sample used with a brief ImRs intervention conducted over just one session, with no treatment control group to compare the effects. Moreover, the treatment did not directly target PTSD specific hotspots of a traumatic event but treated other intrusive images. With PTSD, 77% of intrusions can be matched to hotspots of the trauma (Holmes et al., 2005). Consequently, it may be hard to generalise these results to hotspot related ImRs; using humour to rescript very distressing hotspots may be much more difficult. Nonetheless, this study does suggest that using humour in a rescript could potentially be a contributing factor to positive treatment outcome.

A study by Brewin et al. (2009) delivered stand-alone ImRs sessions for ten individuals with severe and/or recurrent depression and effectively treated negative intrusive images of a specific life event they were experiencing. Individuals received an average of eight sessions of ImRs, in which they were asked to imagine a more desired outcome in the image; examples

included the older self comforting younger self, confronting and overcoming the abuser and powerful compassionate figures protecting and comforting them. This study showed promising results by reducing depression levels, intrusive memory distress and rumination over the course of the treatment. It hypothesised that replacing intrusive negative images with positive imagery was the active ingredient. However, it was a short treatment, with no control group and a depressed sample rather than PTSD. Nonetheless, it illustrated the potential speed of an imagery intervention, with the average length of eight sessions compared to the NICE (2004) recommendations of 16-20 sessions of CBT for severe depression.

Overall, a number of studies have suggested the use of humour and positive imagery can add to the success of ImRs. Brewin et al. (2009) hypothesised that positive images may have a bigger retrieval advantage when considering the retrieval competition hypothesis. Several other factors will now be further examined.

**Believability.** Wheatley and Hackmann (2011) suggest that rescripts have to be believable in order for them to be successful. They must be closely related to key thoughts of the individual being treated in order for them to be meaningful. This is another important factor that may be related to treatment outcome in ImRs which has not hitherto received much attention in previous studies.

**The amount of sensory processing/exposure prior to rescripting.** Studies have shown that intrusive images can be stored as perceptual memories (sensory) with little contextualisation in the more conceptual/verbal meaning levels (Kindt, Buck, Arntz, & Soeter, 2007). Interestingly, when they investigated the effect of both contextual and perceptual processing as treatment predictors in PTSD, it was discovered that only an increase in contextual processing was directly related to symptom reduction, suggesting that perceptual processing is not as necessary. The authors hypothesised that ImRs may be more beneficial than more passive IE techniques as it provides the individual with more opportunity

to contextualise memories, as more meanings (contexts) are incorporated into the rescript. Nonetheless, Kindt et al. (2007) did emphasise the importance perceptual memory can have on promoting later conceptual processing, having a more indirect contribution to improved outcome. This supports existing literature suggesting that for a consolidated fear memory to be modified, it must first be reactivated for it to return to a sensitive and labile state to be changed (Alberini, 2005; Duvarci & Nader, 2004). Therefore, perceptual processing is important for the contextualisation to occur. Both levels may be important factors which lead to a more successful rescript, although as noted by Kindt et al. (2007), there are vast individual differences in processing styles, so this may be difficult to measure. It has been suggested that IE is intrinsic to any rescripting technique (Krakow et al., 2001), but it is very difficult to separate out the exposure component (perceptual processing) from the rescripting. Some studies have shown a minimal amount of IE can still be very effective (Ehlers et al., 2003, 2005; Harvey, Bryant, & Tarrier, 2003). Interestingly, studies have shown that rescripting in PTSD before the trauma occurred can be effective, thereby withdrawing sensory processing and exposure completely. This will now be discussed.

**Timing of the intervention.** Hagensaars and Arntz (2012) found positive results when using ImRs as a preventative strategy for developing PTSD symptoms following trauma. Using an analogue methodology, the researchers showed a group of 76 university students an aversive film and then randomly allocated them into one of three conditions thirty minutes after the film: positive imagery, IE or ImRs. The ImRs condition consisted of recalling and re-experiencing the event for the first three minutes and then altering it to something they would have liked to have happened resulting in a more pleasing outcome. The range of scripts involved: the accident being prevented (n=6), the bodies treated with more respect (n=6), the patient was treated and recovered (n=5) and fantasy scripts (n=2). Following treatment, the ImRs group experienced fewer intrusive memories compared to the other groups and less negative cognitions. The authors proposed that by changing the meaning of the memory very

early on, the event information is stored in the same way, but the meaning of the event is stored and encoded differently. Ehlers and Clark's (2000) cognitive model of PTSD posits that through faulty processing and poor contextualisation of memories, intrusive memories carry distorted negative appraisals. This study supports this model by illustrating that intervening early, before such negative appraisals are formed, may reduce the chance of developing PTSD. Interestingly, scripts that prevented the accident from even happening were the most successful. The point at which the rescript occurs may therefore be an interesting factor to consider when investigating what makes a rescript successful. However, obvious limitations to this study exist, including being a very brief intervention (9 minute) and using an analogue methodology conducted on a sample of students, all potentially resulting in low ecological validity. Nonetheless, these are interesting findings and have already been replicated by Arntz, Sofi, and Van Breukelen (2013) who investigated the effects of rescripting events preceding the actual trauma on a sample of ten refugees with complicated PTSD. Examples of rescripts included: defending the family against tribe attack, revenge by killing the perpetrator and defending against a rapist by growing stronger. Scores on both PTSD and depression reduced following this intervention. Although this study used a very small sample with no control group, and one single treating therapist, the treatment was effective and showed no drop outs, suggesting ImRs can be effective for individuals with complex trauma where the actual hotspot may be too distressing to relive or rescript. Both these studies suggest that timing of the rescript may play an important part in the success of the intervention, with rescripting the events preceding the trauma shown to be effective.

Overall, the various psychological theories explaining the mechanisms of action in ImRs, along with suggestions from ImRs research studies on what makes ImRs successful, have all been outlined. Subsequently, it is clear that gaps in the knowledge base still exist. The rationale for the study will now be discussed along with how it proposes to fill these gaps.

## **What Makes ImRs Successful: Rationale for the Current Study**

Within PTSD, the main therapeutic technique, Imaginal Exposure, has a clear theoretical basis of habituation with a plethora of studies supporting its effectiveness, and thus is an established treatment of choice (Chambless & Ollendick, 2001). In contrast, as discussed, although studies show ImRs interventions treating PTSD to be effective, theories explaining the process of ImRs are still developing, and understanding how it produces change is still in its infancy. Furthermore, Arntz's (2012) recent comprehensive review on ImRs supports this dearth in research surrounding the underlying mechanisms that play a role in ImRs. Studies have suggested potential contributing factors to treatment outcome, as discussed above, including: mastery and control, positive imagery and humour, believability, the amount of IE prior to the rescript and timing of the rescript. However, no one single study has attempted to investigate the process of ImRs and attempt to capture the broad range of factors that may influence outcome in ImRs. It may be helpful to capture these factors in a single-study in order to develop a means of testing which factors are related to treatment outcome to help develop the theories of the underlying mechanisms of action in ImRs.

When reviewing the literature in an attempt to understand what makes ImRs a successful intervention, current studies are mainly based on small sample sizes with only a few therapists delivering the intervention. In addition, research studies often contain a skewed sample of only those willing to take part; as such, participants within the studies discussed above may not accurately represent a typical PTSD sample (Kazdin, 2008). Shame and suspiciousness are often prominent features of PTSD (Hamner et al. 2000; Leskela, Dieperink, & Thuras, 2002). By the very nature of these conditions, people experiencing them may not want to take part in research, and consequently samples in PTSD research may be missing key symptomatic features. These issues inevitably limit the amount one can hypothesise about the mechanisms of action in ImRs. Therapists who actively use ImRs potentially treat and supervise numerous varied cases over years in their practice. Therapists decide when to use

ImRs techniques, face therapeutic obstacles, see the moment-to-moment change occurring in the therapy room, observe the range of successful and unsuccessful treatment cases, and consequently form their own hypotheses on how ImRs works. In addition, within specialist treatment clinics, many clinicians observe the effects of a particular treatment outside the well-known constraints of controlled research trials (e.g., excluding complex cases, limits to outcome data, see Kazdin, 2008). Such observations from expert clinicians, often with high case loads and consequently not so engaged in research, may go unreported and just remain within their clinical base. As Chambless, (2014) reports, these clinicians have much to offer a researcher. Interestingly, a whole special issue in Behavior Therapy (2014) entitled 'Bridge Between Science and Practice' inspired by Kazdin (2008), emphasised the need to bridge the gap between scientists and practitioners by conducting research on the clinical observations of psychologists in order to further the knowledge base in psychological practice. In this issue Goldfried et al. (2014) states that practitioners are a rich source of clinically-based knowledge and hypotheses which are in need of testing with research. In an ideal world, observations of therapists conducting ImRs sessions with all clients would provide excellent observational material, however in reality, not only would this be highly intrusive for both the therapist and the client, it would be logistically difficult and time consuming (Starks & Trinidad, 2007). Several studies have investigated the effectiveness of therapies by surveying clinicians on their experiences (McAleavey, Castonguay, & Goldfried, 2014; Szkodny, Newman, & Goldfried, 2014; Wolf & Goldfried, 2014). These studies specifically focused on forming hypotheses from the data on what factors make certain interventions more or less successful. Chambless (2014) suggests this information is taken further by researchers to refine and develop clinical interventions, thus providing a 'two-way dialogue' (p.47). Often quantitative research is criticised for neglecting the uniqueness of human experience (Henwood & Pigeon, 1992). Moreover, following recommendations outlined in Chambless (2014), data collected via a survey format can be quite limited and restricted. Consequently they advised similar

future studies to employ more in-depth qualitative approaches (e.g., an interview method) to provide a richer picture.

### **Qualitative Methods**

Qualitative research aims to “understand and represent the experiences and actions of people as they encounter, engage, and live through situations” (Elliott, Fisher & Rennie, 1999, p.216). Qualitative methods are best employed when there is a dearth in the subject literature and there are no existing hypotheses to be tested, or at least hypotheses are too abstract to be tested using a deductive approach (Martin & Turner, 1986). Due to there being only a small number of studies into ImRs in PTSD, potentially involving limited samples, with clear gaps in the understanding of how ImRs works and what makes it so effective (as discussed in Artanz, 2012), a qualitative method may be helpful to further investigate this area. A qualitative approach could allow a wider exploration of potential factors that contribute to change in ImRs from the therapist’s perspective. Quantitative methods which use outcome measures may not be sensitive or specific enough to capture the broad range of factors at this early stage of research. Furthermore, even valid and reliable measures still may not reflect the difference in individuals’ everyday functioning (Kazdin, 2008).

**Grounded Theory.** Grounded Theory (GT) was developed by Glaser and Strauss (1967) as a way of producing new theory from data. GT aims to develop a theory grounded in the data that is systematically gathered and analysed. This theory is generated through constant comparative analysis, engaging in a continuous interplay between data collection and analysis (Strauss & Corbin, 1998). GT is well suited to developing new hypotheses and questions about emerging areas of research which are not well known or conceptualised (Charmaz, 2006). It aims to provide an explanatory framework in which to understand the social process using a bottom up approach (Willig, 2008), where the theory is not discovered but emerges from the data (Heath & Cowley, 2004). Owing to this dynamic relationship between analysing and collecting data, theoretical understanding of data is produced



(Charmaz, 2006). Due to the small amount of available literature on the efficacy of ImRs, based on potentially limited samples, and the lack of a substantive theoretical framework for understanding how ImRs works from the therapist's perspective, GT was deemed the most suitable means of investigation. A model drawn from investigating the "daily realities of the substantive areas" (Glaser & Strauss, 1967, p.239) in the clinical use of ImRs could contribute uniquely to the knowledge base and offer the aforementioned bridge between the gap of research and clinical practice.

### **Aims of the Study**

This study attempted to address the aforementioned gaps in the literature. It aimed to explore PTSD therapists' views on ImRs to answer the following research questions:

- a) What is the therapist's experience of delivering ImRs interventions in PTSD?
- b) What do the therapists believe make ImRs a successful intervention in PTSD?

### **Summary of the Study**

Senior Clinical Psychologists who use ImRs to treat PTSD regularly in their practice were interviewed. The data was analysed using a GT approach (Glaser & Strauss, 1967) in order to construct an explanatory framework to further understand the process of ImRs and thus answer the research questions posed.

### **Practical and Research Implications**

The study aimed to broaden the knowledge base in ImRs in order to enhance treatment effectiveness. Understanding the therapist's experience of ImRs and what leads to success in

ImRs could provide key hypotheses and direction for future researchers when considering mechanisms of action in ImRs. In addition, this study could provide information to current practitioners of ImRs to enhance their clinical practice, or provide information for the development of ImRs treatment manuals.

## Method

### Research Design

The study employed a qualitative design to investigate the process of ImRs and attempt to identify the mechanisms of action. A GT (Glaser & Strauss, 1967) design explored experienced PTSD therapists' views on their experience of delivering ImRs and what factors influence outcome in ImRs for PTSD.

### Sample and Recruitment

A purposive sample of eight PTSD therapists were recruited from three specialist NHS trauma services treating complex PTSD (e.g., refugees, war veterans, childhood sexual abuse survivors and chronic PTSD). Two specialist trauma services in London were identified, and once the team leaders had granted permission, recruitment letters (Appendix 1) were sent to all members of the team, along with a participant information sheet (Appendix 2) and consent form (Appendix 3). Following this contact, snowball recruitment occurred through therapists offering to contact other therapists in different PTSD services. Recruitment from a range of sites was important in order to get a wide variety of PTSD therapists and thus a more representative sample.

**Inclusion Criteria.** Inclusion criteria were set to ensure the most suitable participants were recruited. Therapists were deemed eligible to take part in the study if they:

- a) Had worked as a Psychologist providing therapy for people with PTSD for at least two years. This figure was set as within the UK, usually after two years, psychologists have moved up to a more senior level (i.e., Band 8a) and thus hold more experience and knowledge, which was beneficial in this study to provide a more detailed and experienced opinion.

- b) Had used/use ImRs techniques in their clinical practice treating PTSD.

**Sample Size.** Although there are no sample size limits in GT, guidance recommends a continuation of recruitment until data saturation occurs. The idea of what data saturation is and when it occurs is a topic which is debated within GT (Charmaz, 2006). Strauss and Corbin (1998) suggest research should continue until the new that is revealed does not add anything new to the model. However, Willig (2008) states that data saturation is often a goal to aim for as opposed to a reality which is completely attainable. Strauss and Corbin (1998) recognise the strain on resources when conducting research projects (e.g., time, money and availability of participants) and state that “sometimes the researcher has no choice and must settle for a theoretical scheme that is less developed than desired” (p.292). Due to there being limited time resources, only eight participants were recruited for the study. Consequently, these results can only make modest claims and future suggestions, rather than more substantial GT claims.

**Recruitment.** A total of 17 therapists were identified and approached from three specialist trauma services. Six therapists did not respond to the invitation to take part. Three were not eligible because a) they did not have enough experience working in PTSD or b) they did not use of ImRs in their practice. Eight were eligible and took part in the research.

Once therapists had agreed to take part in the study, the date of the interview was arranged over email, giving them at least one week to consider the information and ask questions.

**Participant characteristics.** A demographics questionnaire (Appendix 4) was administered before the interview to collect participant characteristics in order to ‘situate’ the sample (Elliott, Fischer, & Rennie, 1999). The number of years participants had worked as a Psychologist in PTSD ranged from 2-18 years (average 10.5 years) (See Table 1 below). Several identifying factors were omitted from this table to minimise the risk of identifying the

therapists. Likewise, this was the reason for the use of wide age brackets as opposed exact age.

**Table 1: Participant Characteristics**

Participant	Age Bracket	Number of years working as a Psychologist in PTSD	Frequency of ImRs use
1	25-34	6	Once/twice a week
2	35-44	13	Once/twice a week
3	25-34	2	A few times a month
4	35-44	18	Once/twice a week
5	35-44	10	Once/twice a week
6	35-44	17	A few times a month
7	35-44	9	A few times a month
8	35-44	9	A few times a month

### **Qualitative Analysis**

**GT analysis of therapist interviews.** A GT methodology was selected as the most appropriate qualitative method as it aimed to construct an explanatory framework in which to understand the process of IMRs, and answer the research questions posed by developing a theoretical model through close analysis of data.

**Alternative qualitative methods.** Other approaches were considered before GT was decided upon.

*Thematic analysis (TA)* aims to analyse data in order to identify themes and patterns and make generalisations (Braun & Clarke, 2006). TA was not suitable for this project as it does not provide scope to systematically attempt theory development, because of the focus at the level of coding and categorisation.

*Discourse analysis* focuses on language and its role in the construction of social reality (Willig, 2008). However, this method is criticised for not explaining why people use certain discourses (Willig, 2001). While the participants' use of language is an important

factor in analysis, it being the main focus could potentially ignore personal meaning behind the experiences. Furthermore, it would not allow theorising about underlying processes operating in ImRs which need to be explored to answer the research questions of this study.

*Interpretative phenomenological analysis (IPA)* focuses on the participant's individual lived experiences, and how these are constructed using language and ideas (Smith, Jarman & Osborn, 1999). Although it would be interesting to understand how therapists experience delivering ImRs, the main aim of the research was to develop a theoretical framework highlighting specific factors which make ImRs an effective intervention. GT lends itself ideally to this project as it is not restricted solely to 'participant experience', and attempts to offer new insight in order to piece together theoretical gaps in the literature. Therefore IPA was deemed not suitable.

**Differing methods in GT.** Grounded Theorists often take different philosophical and methodological positions which influence the applied methods. As such, there are many different types of GT (Morse et al., 2009), often divided between three main versions: Glaser (1978, 1998), Strass and Corbin (1998) and Charmaz (2006). However, as Charmaz (2006) outlines, researchers can use basic GT guidelines for their research with an addition of more modern methodological assumptions and approaches. Therefore, Charmaz's (2006) practical and theoretical guidelines were used to navigate this GT research project.

**Sensitivity to the data.** Owing to an essay reviewing the literature around ImRs, submitted as part of the Royal Holloway course requirements, it seemed imperative to highlight GT's perspective on prior knowledge. Glaser and Strauss (1967) recognised that researchers do not begin completely free from prior understandings and ideas. Glaser emphasised the need to read very widely around the subject in order to learn 'not to know' and remain sensitive to the data, with directed reading used only to supplement already well-developed theories (Heath & Cowley, 2004). However, the Glaserian paradigm has been criticised for the overemphasis on its inductive nature, ignoring the role of the trained

researcher's indisputable theoretical sensitivity (Lincoln, 1994). As such, Strauss believed the literature can work advantageously to enhance theoretical sensitivity and development of hypotheses. Strauss and Corbin's (1998) method allows researchers to carry any relevant theory they have gathered from previous research into the current study, not adopting a positivist position but instead verifying the data (Walker & Myrick, 2006). Dey (1999) suggested using the existing literature and theory to inform, rather than direct, the development of categories, stating "an open mind is not an empty head" (Dey, 1993, p.229). This way of working was relevant for this study as although the researcher endeavoured to allow theories to emerge from the data, it was impossible to ignore the possibly advantageous knowledge that arose from prior research into this subject. This prior knowledge helped the researcher further understand the language and meanings of what therapists were expressing in the interviews, whilst simultaneously the researcher 'bracketed' any prior assumptions so as not to impose meaning on the data, but instead allow it to emerge (Tufford, 2012).

The researcher was a female Trainee Clinical Psychologist, who, at the time of recruitment for this study, was on a clinical placement at a specialist trauma clinic using CBT techniques and as such, had a keen interest in PTSD using imagery techniques. This meant that some interviews involved interviewing clinicians who provided clinical supervision and teaching to the researcher. The potential costs and benefits of this are highlighted in the discussion. Grounded theorists often acknowledge how the researcher's values and assumptions can shape the research process and findings, and as such they advise self-reflection (Strauss & Corbin, 1998). In keeping with this recommendation, a reflective research diary was kept throughout the study (please see Appendix 5). This diary enabled the researcher to keep track of her personal impact on both the research process and the results, and also reflect on any issues that may have arisen from interviewing known clinicians.

## **Procedure**

**Ethical approval.** Ethical approval was granted through Lancaster NRES (National Research Ethics Service) on 22/05/13 (Appendix 6). Subsequently, permission was granted from the Departmental Ethics Committee (DEC) at Royal Holloway University (Appendix 7) and local Research and Development (R&D) sites from two London NHS Trusts (Appendix 8a, 8b). A substantial amendment was made to Lancaster NRES and accepted on the 29/01/14 (Appendix page 9), along with DEC and local R&D site approvals due to a change in the original project (Appendix page 10a, 10b & 10c).

Participants were given an information sheet (Appendix 2) and consent form (Appendix 3) to read and sign before they took part in the study. They were reminded of their voluntary participation and given permission to withdraw at any point. Informed consent to take part and record their data was taken, and time was given for questions beforehand. Confidentiality was achieved through anonymity of the results using participant numbers in this report and storing the data under the guidelines set out by the Royal Holloway University.

**Data collection.** Data were collected via semi-structured interviews to elicit in-depth accounts of the subject (Barker et al., 2002). All interviews took place at the participant's place of work. Prior to the commencement of the interview, participants were asked to read and sign the information sheet and consent form, and complete the demographics questionnaire (Appendix 4). A preamble was then read out (Appendix 10) and an opportunity for any questions was given. The interview then began, conducted via an interview schedule and recorded on a hand-held dictaphone. At the end of the interview, the recording was stopped. Following this, the participant was debriefed and their contact details recorded if they requested a copy of the results. As a way of testing the ecological validity of the results and the model, two participants were given the results to review. This feedback was sought as a process similar to a respondent validation check (Mays & Pope, 2000).



*Interview guide.* A semi-structured interview guide was developed and followed during the interviews (Appendix 11). Although, not necessarily advocated by the founders of GT (Glaser, 1998), Charmaz (2006) encourages the use of an interview schedule - particularly for novice grounded theorists - as it promotes the use of open-ended questions and gives direction by a clear pacing of topics and questions

The interview schedule was developed by drawing on relevant literature which focused on central ideas in ImRs. The questions were shaped to be brief, open-ended, with prompts and probes that might elicit detailed personal accounts of the therapist's experience using ImRs with PTSD clients. This schedule consisted of three main sections following Charmaz's (2006) guidelines. The first section covered initial basic open-ended questions on ImRs allowing the participant to offer their first views on the subject without suggestion. The second section covered more intermediate questions about their views on how ImRs works, divided up into three parts: mechanisms, moderators and barriers, based on Goldfried et al.'s (2014) paper. The final section covered the therapist's attitudes and personal opinions surrounding the subject and any other information they felt was fundamental in further understanding the process of ImRs. The interview schedule was then verified by the research group (three Clinical Psychologists) and any comments were added. The schedule was then piloted on one Clinical Psychologist to ensure the ease of flow and quality of data for GT.

*Adapting the interview guide.* Following GT's methodological requirements, although the schedule was followed for the first three interviews, it was later adapted by exploring emerging themes and questions more specifically as a means of theoretical sampling (Appendix 12).

*Interviews.* A total of eight face-to-face, single interviews were conducted between March - April 2014. The time of the interviews ranged from 41.36-75.13 minutes (average time =54.38 minutes). The interviewer encouraged participants to talk as widely as possible around the subject of ImRs through the interview schedule.

## **Analysis**

**Interview transcription.** The interviews were transcribed verbatim by the researcher. The process of transcribing allowed the researcher to go into a deeper level of analysis by being ‘immersed’ in the data. Line and page numbers were added to the transcripts to locate data.

**Coding.** Following Charmaz’s (2006) guidelines for data analysis, coding was divided into three phases: initial, focused and theoretical, and although divided by these terms and specific procedures, these processes occurred concurrently ensuring constant comparative analysis.

***First stage: initial coding.*** Initial open coding is the process of immersing oneself in the data, through line-by-line identification of any words or groups of words which seem significant in the data, and labelling them appropriately. These were then labelled as in vivo codes identified by participant verbatim quotes, or a comment or question, with a numeric identifier indicating the interviewee and the line number. In vivo codes are defined in GT as codes that refer to the participant’s distinct expressions, which are then subjected to comparative and analytic treatment like the rest of the codes. Any codes which seem related were grouped into categories (see coding excerpt on Appendix 13). Throughout this process memos were written to keep track of more elaborate conceptual and theoretical ideas which emerged from the data (Appendix 14).

***Second stage: focused coding.*** Focused coding is a process which organises data back together in new ways by making links. This was done by using the most frequent or significant codes to explain and categorise the data. Again, any emerging focused codes were then compared with other codes, and the data to these codes, to ensure the constant comparative analytic process.

***Final stage: Theoretical coding.*** This final stage aimed to identify possible relationships between focused codes and integrate the data around hypotheses in order to produce a theoretical understanding of ImRs.

**Writing memos.** Memo writing is the on-going process of writing records of the researcher's thinking throughout the GT research process. Memos were written throughout the analytic process which helped develop ideas, make comparisons and facilitated theoretical development (Appendix 12).

**Concurrent data collection and analysis.** Concurrent data collection and analysis is a fundamental part of GT. Once the study had collected its first initial set of data this was coded before more data was collected. Constant comparative analysis was conducted in order to successfully build the theory up from the data itself leading to a fully integrated GT.

**Theoretical sampling.** Theoretical sampling was conducted by choosing a sample that would provide the most information-rich source of data to meet the analytic needs of the study by focusing on those that may elaborate on categories or concepts. This method was used to attempt to saturate categories.

**Write up and model development.** Themes were then presented as a narrative account with verbatim examples from each participant to support the themes (Willig, 2008). A final model was produced to illustrate the process of ImRs, in line with GT principles.

## **Research Quality**

**The validity of qualitative analysis.** To maximise reliability and validity within qualitative research, guidelines developed by both Elliott et al. (1999) and Henwood and Pidgeon (1992) were followed. This next section details how the necessary guidelines were met.

1. ***Owning one's position and reflexivity.*** My theoretical orientations and personal anticipations relevant to the research were highlighted (Page 35) to help the reader gain a context for the interpretations made in the analytic process, and allow them to consider potential alternatives. In addition, a research diary was kept to reflect the researcher's own interests and values along with the reasons for any methodological decisions (Lincoln & Guba, 1985).
2. ***Situating the sample.*** The sample was 'situated' by describing the participants in the table of characteristics (Table 1), thus enabling readers to judge the range of people and situations to which the findings may be applicable.
3. ***Negative case analysis.*** 'Disconfirmed cases' or data that did not fit into the themes or codes identified were reported and explored wherever possible.
4. ***Grounding in examples.*** Examples of the verbatim data were given in the analysis to illustrate the procedures and the understandings of the data, allowing readers to form possible alternative meanings.
5. ***Providing credibility checks:*** One clinical psychologist, experienced in qualitative methods, checked three coded interview transcripts to ensure there was a clear and explicit analytic process and no obvious themes were missed. Transcripts and resulting themes were also discussed within a GT peer support group with two fellow trainees using GT methods. In addition, both my academic and field supervisor externally audited the analytic process, giving feedback on categorisation of codes into sub-themes and themes
6. ***Coherence.*** The understanding was made to fit together to form an underlying structure for the subject of ImRs, in a way that achieved coherence and integration.
7. ***Documentation.*** To ensure the transparency of the study, a 'paper trail' was included in the appendices (Appendix 13) presenting an example of the analytic process (Flick, 2009).

In following these guidelines it was envisaged that the qualitative results had suitable research validity.

## Results

Eight clinical psychologists who regularly used ImRs in their practice took part in this study. From the interview data, four theoretical codes were formed, which consisted of eleven focused codes (presented in Table 2 below). These focused codes comprised of numerous code properties, initially developed through line-by-line coding of the data. These initial codes were then further analysed through constant comparative methods to develop the focused and theoretical codes. The process of coding is demonstrated in an interview excerpt and a reference table of codes with line numbers (Appendix 14 & 15).

These codes will now be presented in a written account supported by verbatim quotes. Any identifying information was omitted from quotes to maintain confidentiality. In addition, to ensure anonymity, participants were referred to by their participant numbers, ranging from 1-8. In the verbatim quotes from the interviews, text within square brackets indicates author clarification and ‘...’ indicates where some of the quote has been removed for conciseness. Where possible, the number of therapists contributing to the development of the code was stated, both to suggest the strength and ultimately the validity of the code, and to create transparency in the analytic process enabling readers to infer their own conclusions, something stressed in qualitative guidelines (Elliott et al., 1999).

In line with a GT approach, a diagrammatic model was developed to illustrate the process of using ImRs in PTSD and what factors the therapists believed make it a successful intervention (see Figure 1, page 73). This model presents the different categories and interrelationships that exist between the codes.

**Table 2: Theoretical Codes, Focused Codes and their Properties**

<b>THEORETICAL CODES</b>	<b>FOCUSED CODES</b>	<b>PROPERTIES OF THE CODES (initial codes)</b>
<b>1. Using ImRs in PTSD</b>	1.1 Understanding the concept of ImRs	Acknowledging the role of Imagery in PTSD Using IMRS across therapeutic models and diagnoses Differing definitions and ways of working
	1.2 Deciding when to use ImRs	Being reluctant in starting treatment with ImRs Using it for presentations going beyond fear Treating stuck images
	1.3 Valuing ImRs techniques	Witnessing its success Therapist's enjoying the process
<b>2. Facing obstacles in working with the imagination</b>	2.1 Therapists working with the unknown	Coping with gaps in the literature Fearing then unknown Worrying it will go wrong Concerns in using revenge fantasies
	2.2 Facing the client's uncertainty in doing ImRs	Being met with the client's uncertainty prior to using ImRs Overcoming client's doubts
	2.3 Facing clients unable to use imagery	Working with a natural variation in imagery ability Overcoming the inability to use imagery techniques Identifying other obstacles in using imagery techniques

<b>3. Identifying the mechanisms of action</b>	3.1 Restabilising power	Working with the client's experience of lost power Empowering the client through the process of client led ImRs Enabling the client to take control of the image Enabling the client to take control within the image Clients becoming more powerful in everyday life as a result
	3.2 Enabling an emotional shift to occur	Bringing the emotion online through imagery Describing the emotional shift Matching ImRs with the meaning and sensory elements to enable the shift Providing a sense of safety and comfort in the image Gaining a different perspective to enable the shift Working with the experimental nature of shifting the emotion
<b>4. Moving from the unknown to the known</b>	4.1 Making sense of ImRs	Working with the confusing false nature of ImRs Understanding how the new image feels believable to the client Choosing the appropriate theory to believe Using other therapies to learn the mechanisms
	4.2 Looking for structure	IMRS requiring a protocol Increasing training and supervision on ImRs Requiring an evidence base
	4.3 Researching ImRs	Generating ideas for future research The therapist's responsibility to research the field



## 1. Using ImRs in PTSD

*1.1 Understanding the concept of ImRs.* In understanding the treatment technique ImRs, therapists acknowledged the importance of working with imagery in PTSD. All therapists stressed that imagery is a key symptomatic feature of PTSD, with those diagnosed, experiencing intrusive images such as flashbacks and nightmares, and as such, four therapists stated imagery should be a core part of the treatment. Despite imagery being an integral part of PTSD, definitions of imagery in psychology did not seem completely clear. The majority of therapists suggested imagery in PTSD should be thought of as multi-sensory, rather than just the assumed visual imagery - although as mentioned by all therapists, visual imagery seemed to be the easiest sensory modality to rescript. This multi-sensory element seemed important when doing ImRs, which is reflected in themes further down.

*it's almost like you are constructing your treatment based on what somebody is presenting with, and in PTSD images are quite prominent in, traumatic images are very prominent (P3)*

*Imagery is sort of a vague term of something... a lot of people just talk about visual images whereas images take place is all the modalities ....PTSD is in all the senses (P5)*

One therapist went on to consider the link between imagery ability and PTSD and supposed that someone who is very able to do imagery may be more pre-disposed to develop PTSD.

*maybe they're suffering from PTSD because they're good imagers, perhaps someone should look at that... the good news is you're a good imager the bad news is you've got PTSD (P6)*

Therapists emphasised the trans-theoretical and trans-diagnostic nature of ImRs; how it could be used across therapeutic models in PTSD such as CBT, EMDR, narrative exposure therapy and schema focused therapy. Five therapists reported how they had used ImRs effectively to treat other clinical disorders, such as bipolar, psychosis, depression, anxiety and social phobia. However, one therapist stated that because of the core imagery component in PTSD, ImRs seemed most suited for this diagnosis.

*because it easily fits in, because imagery is a core part of that treatment, and so working with imagery in all kinds of different ways, really starts with PTSD and it's then broadened out to the other conditions (P2)*

ImRs seemed to be a very wide and all-encompassing term. An inevitable consequence of this was there being differing ways of defining and using ImRs. All therapists used ImRs as a way of updating traumatic hotspots, however, as one therapist noted, the demarcation between updating memories and ImRs was unclear. Common ImRs techniques included: manipulating the image, replacing the negative image with a positive/neutral image, bringing in a compassionate image, bringing in the adult self, conversations with the deceased and changing the content of the memory (either during the most traumatic part, at the end or before). However, as one therapist noted, clinicians are using the technique differently. Half the therapists followed the Arntz three-stage model as a way of working with ImRs. Two therapists did not encourage changing the content of the memory, and stressed the importance of focusing on changing the feeling of the memory instead. One therapist was against using fantastical images to reduce the risk of trivialising the event. Two therapists had effectively used ImRs to intervene before the trauma even occurred, so the traumatic event does not even happen.

*how do you define what it is, I mean because actually people talk about oh do you do imagery rescripting, if you actually stop and think about what you're saying it's a bit like, oh do you do therapy work? You know, because it's so wide (P4)*

*but you do then get into a conversation about where restructuring starts and updating ends, and I think that's a bit difficult to say actually. Because every rescript is also like an update in a funny way (P2)*

*I do think the clinicians are using it differently (P3)*

*doing something to the assailant, whereas the real healing takes place when the person does something to themselves (P4)*

*I've always been probably a little bit hesitant about having anything too kind of fantastical in the images, simply because ... you might potentially be seen as trivialising it in some way (P5)*

Overall, in trying to understand the concept of ImRs, the importance of using imagery was universal, however, due to a very broad definition, there seemed to be clear differences in practices.

**1.2 Deciding when to use ImRs.** In deciding when to use ImRs, the majority of therapists were reluctant to begin therapy with ImRs and preferred to prioritise more established trauma-focused treatments. There were varying reasons for this order in which they worked, which included working with the evidence base, the time consuming preparatory nature of ImRs and wanting to know the nature of the trauma first in order to identify hotspots and develop a clear formulation. Several therapists believed that going straight into ImRs first may invalidate or minimise the client's traumatic story. In addition, the majority of therapists believed a trusting therapeutic relationship needed to be established before ImRs could begin.

*I would want to do more of the trauma focused work first... it wouldn't be my first point of call. Maybe a compassionate image, that I'd use more in phase one work, or earlier, but real image restructuring I wouldn't do first off (P3)*

*I still use that [reliving and updating hotspot work] as a first technique in almost everybody, and that's what also I tell my supervisees to do because the evidence is strongest (P1)*

*[if] you can shift that affect [through standard reliving and cognitive restructuring] that's easier than having to explain all about imagery and why this is a good idea and how the brain can't tell the difference and you know, it's a long discussion (P6)*

*I felt like if I hadn't heard her story before saying 'let this image fade away', it'd be ... potentially minimising of what happened (P5)*

Interestingly, a couple of therapists even explained their reluctance to use it first in order to save ImRs as a last resort.

*I wonder if I don't use it because I feel it's a little bit like the secret weapon in my arsenal and if I use it up too soon and it doesn't work I've got nothing left (P7)*

Although many therapists alluded to this reluctance to prioritise ImRs, three stated how it had worked as a first line treatment in PTSD, and one described how they changed their practice as a result.

*so I've started doing a thing where I just sort of say, ok, don't relive it, don't get through the hotspots, what do you need to do with this memory to feel different? What needs to happen? And go in really wherever, so, at the beginning, at the end, at the worst bit, just try to throw rescripting at it, without going through all of the other stuff, and that seems to be as effective (P2)*

All therapists emphasised how they often used ImRs for more complex emotional presentations which consisted of more than just fear presentations. These presentations involved emotions such as shame, humiliation, guilt, helplessness and powerlessness. The

majority of therapists stated that they commonly used ImRs for sexual abuse, abusive relationships, traumatic bereavement and repeated traumas. In addition, all therapists have used it effectively as a tool for rescripting nightmares.

*what's maintaining the PTSD, and fear is partly maintaining the PTSD but it's ... that sense of not actually existing as a human being, and that's a sort of a thing bigger than fear (P5)*

*you need it [ImRs] when the person isn't really that alright....so 'I got out' isn't very comforting because you know how long it took. So I think I use it when people have sort of much more repeated traumas because a verbal 'I'm alright' is not going to shift their affect because they're not alright (P6)*

All therapists described how ImRs was helpful for intrusive images that persist after trauma focused treatment, with therapists often describing these as 'stuck images'.

*that's usually where people are stuck, in their traumatic memories...they're stuck in this shame, or the guilt, rather than accessing the sadness of the memory to move them on (P4)*

*there are often some [intrusions] that are... sticking... some that are particularly disrupting to them because of how it makes them feel and that's normally a shame based thing ... the ones that stick tend to be the kind of rape ones... where the person just feels excruciating shame, and very occasionally the ones that stick are the worst, more frightening things, like a mock execution or something and so they're not responding to being talked about to be made into a c-rep or whatever's going on ...so we have to try something else, and in my experience that [ImRs] works like a charm (P6)*

Many of the stuck images described by the therapists involved situations where the client was completely out of control and powerless, this theme will be discussed in greater detail further below.

**1.3 Therapists valuing ImRs techniques.** All therapists were very positive about using ImRs techniques. They valued how powerful, potent and successful the technique was in treating PTSD. Three described how their current clinical use of the method has been positively reinforced by its success in the past. Furthermore, therapists described enjoying the creative process of ImRs not just the successful results. Three therapists reported how they appreciated being able to offer the client a method to change the memory, as opposed to just pure trauma exposure work. In addition, as noted by two therapists, this was therapeutic for therapists, seemingly making them feel less helpless.

*it's quite exciting just to see what people's minds can come up with (P7)*

*So it was the first time I was exposed the idea of doing something that actually changes what you're visualising rather than just remembering it as it was (P2)*

*I have to sit there day after day after day listening to these terrible things and I'd like to gun them all down myself if I could but I can't so I'll do it in my imagination and it helps me too (P6)*

Although all therapists described a positive side to using ImRs, this was often coupled with anxiety in using the technique, which will be discussed in the next section.

## **2. Facing concerns in working with the imagination**

**2.1 Therapists concerns in working with the unknown.** Due to the emerging nature of ImRs in PTSD, all therapists reported a dearth in the evidence base. Owing to research still in its infancy, it seemed therapists entered into an unknown when using ImRs, which for some

was concerning. In addition, several therapists reported how the profession of psychology did not yet possess an adequate knowledge base in ImRs, in terms of how it works and for which presentations it is best suited. Consequently, three therapists described trying to discover this information themselves. Considering how effective ImRs appeared, a dearth in evidence seemed frustrating, preventing therapists from using it more often and gaining confidence in the method. Despite this, two therapists acknowledged there was sufficient evidence to use it clinically.

*I think there is always that fear of... using something that, a technique that hasn't got massive evidence (P8)*

*when I read stuff in the books I kind of think, gosh, it's quite vague and they don't really know what parts of it work and what parts of it don't (P5)*

*but of course there's no proof, the problem is there's not enough evidence so you can't just suddenly start treating everyone with imagery and nothing else ... much as we'd like to, I mean I think some of us would like to do that and nothing else but we can't (P6)*

A prominent theme therapists discussed was a sense of apprehension in using imagery to enter the unknown and unpredictable realm of the client's imagination. Although guidance could be offered, it seemed the most effective way of using ImRs was to allow the client to lead the course the imagery took. As discussed previously, this unknown creative element could be seen as a positive; however, it could equally render it an unnerving experience.

*it's a very imaginative, interesting process, which um, can lead in directions which are unpredicted or unexpected (P3)*

*it can be a little bit kind of like, flying by the seat of your pants kind of work because you just don't know what's going to happen (P1)*

*because you don't know exactly where it's going to go or what they're going to come up with and you just have to feel your way through it a little bit which can be quite nerve-wracking (P7)*

One therapist commented how this unknown element conflicted with the amount of structure and control therapists, as professionals, liked to have in therapy.

*therapists often we have a fear, and sometimes me...if you haven't pre-rehearsed you don't know what's going to come up in that moment of high affect, which can be very rousing and potentially distressing for the client, and I think particularly CBT therapists like to have some sense of structure and kind of knowing where they're going and you can't predict that in ImRs (P8)*

Alongside this fear of going into the unknown, therapists described a perceived fear of the power of ImRs and whether they would be able to manage what arose, especially in more junior therapists. Which, as four therapists all stated, was unfounded; something they had learnt through their own clinical experience.

*I think there's also a fear of the power of it in therapists as well, that it might get completely out of control and stuff, which of course it doesn't (P6)*

*I supervise a lot of therapists on PTSD some of whom are relatively inexperienced, and certainly when they're doing it to start with they find it quite nerve wracking you know, and they worry that it might go wrong basically and that they might really upset somebody or that they might re-traumatise them or unleash some stuff that they're not going to be able to deal with, and I've done it enough times to know that whatever comes up you can always deal with it (P1)*

In entering into the unknown and unpredictable sometimes clients wanted to seek revenge on a perpetrator. Therapists described varying concerns in doing revenge fantasies in ImRs. They all agreed that ultimately you had to follow the client's lead, but two suggested they did not



actively encourage them. A couple of therapists were hesitant in using revenge fantasies as it could lead to rumination rather than resolution. The sense of unease in going into the unknown seemed to increase when discussing revenge fantasies. A couple of therapists alluded to professional liability when doing revenge in imagery and how they would avoid this with clients perceived as being riskier or more aggressive. However, five therapists saw the benefit in using them in ImRs. One therapist described how having scientific papers to support the use of revenge fantasies was comforting, appearing to be a source of professional protection.

*sometimes you do have to go to revenge fantasies with the patient because it's not for you to say, "no I don't like revenge fantasies" ...you've got to be very careful because I don't, um, encourage revenge fantasies, because I have a lot of veterans who are very angry, and they're quite capable of acting out their revenge fantasies (P4)*

*Is this actually going to help them or is it just going to make them ruminate and kind of fester and feel angry about something (P7)*

*like revenge fantasies... it can feel a bit, a bit edgy, and you have to have a bit of a trust that you're not doing something stupid or damaging, but you can well imagine, it's the old, the two rules of thumb, the daily mail rule and the coroner's court rule, if this was written about in the Daily Mail, how would it look? "so I was telling my client your honour that he needed to imagine shooting his wife in the face" (P2)*

*I think they're marvellous [revenge fantasies], and very reassuringly there are two papers... that say it's absolutely fine (P6)*

**3.2 Facing the client's uncertainty about doing ImRs.** Therapists described that clients came with their own concerns in working with the imagination. One of the most common client reactions to ImRs, described by all therapists was 'yes, but that is not how it happened'. Therapists discussed other common client reactions to ImRs, such as it feeling

silly and some clients even worrying they might get brainwashed and excuse the perpetrator. All therapists reported trying to overcome this uncertainty by providing a good and thorough rationale for the concept of using ImRs. Several therapists went further by explaining the power of imagery and how as humans we often play with our own images. Additionally, all therapists described the process of ImRs being based on a process of trial and error, and in overcoming these concerns, like many CBT methods, therapists described setting it up as an experiment that clients can test out. Three therapists stated they would have a conversation first about what the client wanted to do in the rescript, to ensure it ran smoothly once in the imagery.

*because some people I guess take it very literally, this thing happened, why should I try to change that in my mind, this is what happened (P3)*

*it's a long discussion at which people think you're a bit mad for a while until they try it (P6)*

*people get caught up on 'but it didn't really happen', and they need more discussion around it doesn't really matter what happened in your mind because memories aren't accurate representations of what happened in your life anyway, so we can do what we like in our mind ...it's always important to educate people around the fact that they torture themselves with fantasy forward images, of things that never happened... (P4)*

*people say 'but what's the point because that's not how it happened', or an associated one with that is, 'am I going to start thinking a bit differently and let them off the hook?', um, 'am I going to start to think that it wasn't their fault when it was?', so often people have beliefs that they are going to somehow be brainwashed into believing it wasn't as bad as it was, or ... wasn't really the perpetrator's fault, and the solution is generally to set up as an experiment... let's do it once and let's see*

*if you're any less convinced of their blameworthiness at the end of it, and actually what happens is they're more convinced of their blameworthiness, they're more clear about what was wrong about that event, not less (P2)*

These common reactions created hesitation in some therapists by not wanting to invalidate the client's story through using fantasy rescripts in ImRs. One therapist spoke about this perceived invalidation.

*I think I've always been probably a little bit hesitant about having anything too kind of fantastical in the images, simply because it might introduce an idea ... that it's not really real...you might potentially be seen as trivialising it in some way, I don't think that necessarily has to be the case but I think I've probably had a bit of a belief myself about that, which has influenced me to an extent (P5)*

Furthermore, in order to overcome the client's doubts, therapists had to have confidence in the technique. One therapist stressed the importance of therapists themselves believing in the technique of ImRs and agreeing with the rationale in order to encourage the participation of the client.

*I find with the people I supervise if they're keen proponents of ImRs they can normally sell it to their clients, and people who I supervise who are less sure about it sort of say oh my clients don't sound sure, but I think that's more about the therapist, putting it across as something (P7)*

**2.3 Facing clients unable to use imagery.** One other potential obstacle therapists described encountering when using ImRs, as highlighted by all, was the client's natural ability to use imagery techniques. Some therapists reported a natural variation in imagery abilities, with those perceived as more capable having a naturally creative and artistic personality and also good visual memories. However, one therapist questioned the lack of imagery ability in this population.

*there is sub-group of people, 5-10% of people that can't get images, so, if you have someone that literally can't create imagery you know, you say then take me through your house and tell me what it looks like and they're not even able to do it, then you're going to have a very hard time doing ImRs with them (P2)*

*there's a sub group of patients, who have got terrible, terrible PTSD, flashbacks and pre-morbidly had fantastic visual memories and it's almost like their visual memory was so good, that at the moment of trauma, it just recorded everything in such vivid detail ...so they are good candidates I think (P2)*

*for anyone that says, 'oh I'm not very good at imagery' but they've got all those symptoms you sort of have to question it, especially if it's very visual (P4)*

Half the therapists spoke about the importance of practising and rehearsing rescripted images, which as one therapist pointed out, was even more important for those who are not such natural imagers.

*If they're not good at imaging then they're going to have to practice it, so you're going to have to try to hold their faith as you practice, they're harder I think (P6)*

Three therapists emphasised dissociation as a big barrier to imagery work and two reported how agitation could prevent people from staying with the image. Three therapists acknowledged that sometimes ImRs just does not work with some people, although one therapist thought that everyone could gain some benefit from the technique.

*[if] they're not really connecting to it, it doesn't seem to be really effective, then I'll move on and try something else, I don't think it's necessarily effective for everyone, you know, as most of our techniques aren't (P1)*

*I've had aspects of imagery rescripting that haven't worked but I've never had anyone for whom imagery rescripting in some respect hasn't worked (P7)*

There were many concerns in using ImRs techniques, both from the therapist and client's perspective. These concerns may develop, or be perpetuated by the therapist's belief in the power of the technique. Power seemed to be a very important theme that emerged and will now be discussed.

### **3. Identifying the mechanisms of action in ImRs**

**3.1 Restabilising power.** The majority of therapists described how many of the clients with whom they used ImRs techniques, have experienced and were continuing to experience a sense of lost power, both through their PTSD symptoms and the traumatic event/s experienced. This sense of powerlessness was illustrated by several therapists describing case examples of horrific situations in which people were treated so inhumanly and perpetrators had absolute power over the individual. In addition, the majority of images therapists described as 'stuck' seemed to be symbols of power and subjugation, such as faces of perpetrators, the sound of keys in locks, gruesome images of dead loved ones, police uniforms, the smell of semen and physical sensations of choking on a penis.

*I have these flashbacks and there's nothing I can do about them, and they're going to send me mad and I can't stop myself feeling powerless (P2)*

*She also had many other instances of abuse, witnessing domestic violence, physical and emotional abuse from mum, sexual abuse by an uncle later on, rape by a partner, but a prominent theme was powerlessness (P3)*

*a child who's remembering father coming into the room at night, it being dark, being very scared, the sinister voice, the fact that the father is then lying on top of them and abusing them and trying to keep them quiet so they might have their hand over the mouth and it feels very frightening and disempowering (P4)*

*this man was really psychopathic and had no capacity for empathy, no capacity for warmth and treated her so badly over a six year period she was locked in a basement the whole time ...treated like an animal, or treated like somebody that has no soul (P5)*

Despite powerlessness being recognised as a key presentation following most traumas that were treated with ImRs, some therapists' views differed on the role powerlessness has in traumatic bereavement (another presentation for which ImRs was described as commonly being used). One therapist did not agree that lost power was a feature of traumatic bereavement; however, two therapists thought there was always an underlying sense of lost power and control of the situation, amongst other feelings like guilt and shame.

*usually the people who have been bereaved in really horrible circumstances ... a very lack of control and so maybe you doing the work is maybe helping to give them a bit more control to feel able to say to say goodbye to that person or to, because they may have missed that opportunity, so it probably does involve power as well as probably other core cognitions (P8)*

In re-establishing this sense of lost power, all therapists spoke about the importance of ImRs being led by the client. It seemed this process empowered the client by allowing them to get a sense control. Moreover, handing the power back to the client appeared to be a possible mechanism of action in ImRs. Therapists stressed the importance of asking clients open questions in ImRs to see what they wanted to do to feel better about the image. This shift of power was described by most therapists as an enjoyable process, but often left half of the therapists feeling apprehensive at times, similar to the previous theme.

*I'm sort of quite irrelevant, once I've got someone to believe that this is a good idea and once I've analysed what it is that we need to change, then it's sort of over to them really (P6)*

*what's interesting to do, is to go in and say, what do you want to do, how do you, what do you need in this moment and do what they need to do, if you go in with too much of an advance idea you might actually squeeze the potential benefit from it (P1)*

*there's nothing more powerful as a therapist than for the client to take power of the session...it's lovely when clients come up with their own stuff (P8)*

*I think that's one of the things that's so exciting about doing imagery rescripting is you kind of let go of the reins a bit and it makes it quite exciting because you don't know exactly where it's going to go or what they're going to come up with and you just have to feel your way through it a little bit which can be quite nerve-wracking (P7)*

Furthermore, one therapist highlighted how ImRs can be much more unpredictable than other techniques directed by guided discovery and Socratic questioning. Despite these techniques aiming to offer the client some control, the therapist reported the allocation of power and control to the client through ImRs felt more authentic.

*we like to say we're being Socratic but we always know where we want to client to get, if their belief is 'I'm bad' you want to get them to 'I'm less bad' or I'm good or whatever it is...whereas with ImRs you kind of can't do that, because you don't know what's going to come up, you can't guide them in the same way as you do guided discovery to a certain extent ...which isn't always as Socratic as it should be, so...you are handing over that power to the client (P8)*

However, all therapists remarked that the amount of control given to the individual client will ultimately vary. Consequently, half the therapists reported feeling that the open nature of the questioning and level of prompting should be guided by the client's ability to both do imagery, and to engage or stay with the process.

*sometimes they need a little push at certain points, and other times you can kind of just take your hands off the wheel and they're driving (P1)*

*she was someone who struggled to come up with some of the rescripts spontaneously... I guided [her] through a bit more, so I remember saying to her 'what are you feeling when you're in that memory' and she said 'I just feel really, really scared, I feel like he could do anything to hurt me, I can't protect myself', so I'd sort of ask her 'what do you think you could do?' And she's like 'I don't know, I don't know, there's nothing I can do, I'm completely helpless', so I'd prompt as much as I could and then when I felt I'm not getting anywhere I think with her I said, 'well is there anything you could do to make it so that he can't hurt you? And she wasn't sure and I said 'could you put something in the way or is there some way of creating some distance or doing something?' And then she came up with the idea of putting him in a cage, behind bars... I kind of had to prompt her to a certain point but then she got the image and then her fear came down...but...she could still hear his voice in her mind, so then she decided to make it a kind of sound proof box sort of Hannibal lector box that he was in and then she couldn't hear him and then the fear went down and the anger came up... So then she decided that she wanted to bring all of her friend and family around her in the image...and then brought his friends and family in who then all knew what he had done... I think because she was so caught up in the fear and the shame... once that shifted, then she could go with it and kind of move it around and change it as she needed (P7)*

*where it's all about helplessness and lack of control, often people have in the room a bit of a sense that they can't really speak, and so if you can help them to think of the words, or even you know, Jeff Young style, you model it, so ok, I'm going to come into your image and I'm going to say these things, I want you to watch and see what*



*happens, and then the next time then they are often more able to, um, to start to take that... and do it themselves (P1)*

In re-establishing power, all therapists described how it was powerful for clients to realise they can control the image. Explaining the benign nature of images to clients seemed to be helpful and half the therapists described often doing this with clients. Clients could then practise taking control of images through various manipulation techniques.

*I think rescripting is as much about imparting a sense of control over someone's mental processes, as it is about the content of their particular rescript (P2)*

*it's not images that causes harm...images are really you know nothing, it's the emotions they generate in us that causes distress (P4)*

*by him realising that he could manipulate the images himself, it took the power away from that picture, because it's only a picture, it's only a leftover thing from the past, it's not representative of danger now (P5)*

*making him smaller...changing it to be black and white instead of colour, different things that allowed her to be more in control of the image was helpful for her because control was a big theme (P3)*

Furthermore, one therapist who often used such techniques described the importance, not just of manipulation, but changing events within the memory.

*the manipulation stuff works quite a lot on the sort of what it tells you about the memory and your ability to control it but there's an additional element that comes from actually changing the content of those images and the way that they unfold (P2).*

In changing the content of the image, all therapists gave examples of rescripts in which the client took the power and control back. This seemed like a very strong feature of ImRs and often involved clients saying or doing things that they could not do or was not done at the

time, such as: standing up for themselves or being stood up for, being comforted, getting revenge, humiliating the perpetrator, saying goodbye and covering up or burying dead bodies.

*people haven't had the chance to stand up for themselves or to kind of get something back which makes them feel kind of, in control (P1)*

*he can get out and he can walk away, he's in control (P8)*

*I think clients seems to like being able to change something maybe they feel quite helpless about (P7)*

*she felt completely powerless, humiliated and not believed .. ..so we did quite a lot of rescripts where .. she showed him up for what he really was and was quite assertive and got the power back (P1)*

In attempting to re-establish the power for the clients, the issue of seeking revenge inevitably surfaced. Acting out violent revenge fantasies seemed to be a contentious issue within ImRs practices. Several therapists thought, when used in the right way, it was a helpful technique; in contrast with two other therapists who did not believe it was ultimately beneficial. Two therapists described how initially clients may want to seek revenge but through the course of therapy this usually dissipated.

*my theory is that ImRs or that sort of revenge fantasy initially it makes you feel worse, but it allows you to then come to a resolution and it's a problem where you just get hooked onto the fantasy and not onto the resolution (P2)*

*you are fighting fire with fire ...a lot of us have imagery in our mind which is slightly revengeful, you know slapping people, or kicking people...that gives us a sense of, ha, but the problem is it's linked to...a sort of evolutionary, social dominance, whereby, 'I got you then and you try and pull me down the hierarchy and I'm going to get you back'. That is a precarious position. It's one way to gain status in your mind and in*

*the group but it is precarious, because you're always vulnerable to the next one, so there's no real resolution in revenge fantasies for me (P4)*

*she was actually really upset ... because she felt she was as bad as him that she'd wanted to use violence against him, even though it'd felt helpful at the time and it had empowered her (P8)*

*normally when it seems like a revenge type one might be a good thing, that by the time the person gets to doing that they don't really want to do that anymore...what happens is the anger ends up getting processed to an extent where the revenge related image doesn't seem very peaceful (P5)*

In addition, re-gaining power in the image through a less violent style of revenge was discussed by several therapists, which seemed to be more appropriate for some clients.

*So rather than killing the perpetrators, they would be licked into a slobbering mess by this dog, and so that humour also was really good which is quite important when you have got people who are little handy for violence (P2)*

*her sense of being humiliated came down because she felt that he was then humiliated, I think she ended up with him being naked and everyone laughing at him (P7)*

*his face might still be a bad face but it doesn't have power anymore because actually it's the face of somebody who doesn't know how to live a good life... we always say, the best revenge is living well (P5)*

Three therapists suggested how ImRs can be a way of modelling behaviour. This modelling can then be transferred to general life skills, with clients becoming more powerful and assertive in everyday life.

*she'd also become a bit of a pushover in everyday life .. she'd got a bit of learned helplessness... said and kind of standing up to him, it helped the PTSD hugely but it also helped her generally to become more assertive (P1)*

*I have had some ripple effects where you know someone who's been very subjugated might actually go home and speak up in their relationship or something, kind of assert themselves in a way they wouldn't normally (P7)*

Overall, it appeared that gaining power and control both of and within the image seemed to be a prominent theme in ImRs, and a possible mechanism of action. However, ultimately the goal of re-establishing power was to gain an emotional shift, something that will now be discussed.

**3.2 Enabling an emotional shift to occur.** All therapists reported from their experience of using imagery techniques that they are much more effective in accessing emotions than verbal techniques. The majority of therapists spoke about the superficial nature of cognitive work in therapy and how the ultimate aim of ImRs was to target the emotional experience of the individual. Half the therapists described how ImRs is powerful as it brings the emotions online to enable an emotional shift.

*in order for that to be real, you need to bring it to life a bit more, because if not it's a bit too intellectual (P5)*

*you can talk about what you ate for breakfast, but if you imagine what you ate for breakfast it's going to bring out feelings and sensations and how it tasted and how it looked, so I think it just provides a much richer picture (P3)*

*you are really connecting at an emotional level ...we do a lot of work on our whiteboards with our cognitive restructuring and things like that but somebody has to feel differently about something and I think when you do an ImRs... you're actually generating the emotion (P2)*

*it brings that affect online through evoking the different senses and making it real means that it can just bridge that heart head lag that I so often see in my clinical practice when I'm just working on a cognitive level the whole, 'I know it's not my fault but I don't feel that', imagery can just help you bridge that (P8)*

Most therapists stressed that ultimately what they aimed for in ImRs is an emotional shift, and this did not necessarily have to be a shift to a more positive emotion.

*We do talk about shift because when you're working with memories, something changes in the memory and that's what you're looking for the whole time, it's that change which will be a sign that you're doing the right thing... once someone comes back and ... I just feel a lot more, kind of, I feel different about what happened now, or the memory doesn't feel quite as distressing as it used to, or I don't feel guilty like I used to or something and that's what I mean by a shift (P1)*

*people can report they can talk more freely and generally they'll say, I feel, I don't feel helpless anymore, or, um, or, I don't feel alone anymore, or weak, I'm not weak or it's not my fault, or in other words they will say, that the emotion has receded (P1)*

*if you shift the guilt to feelings of sadness, that you hurt, rather than the meanness of it, through ImRs, that can be quite powerful (P4)*

In order to achieve this emotional shift, all therapists stressed the importance of the rescript being driven by the formulation and matching the meaning of the hotspots. Two therapists described how matching the rescript with sensory elements of the original memory led to a successful emotional shift.

To allow the emotional shift to occur, five therapists reported the importance of the individual feeling safe and comforted in the image. This allowed the client to have a different relationship with the image and brought about an emotional experience of feeling safe. Four

therapists spoke of other people/beings that came into the image to make them feel safe and protected and two therapists spoke of how clients imagined some physical protection.

*the rescript is, I'm lying there, it was very frightening but I'm ok because I survived this, and you know, the question is, I'm ok and I survived this and holding on to that makes me feel safe and strong, because it wasn't my fault (P4)*

*we brought in the perfect nurturer to help her kind of comfort the younger self, at one point we brought me in as therapist, you know I stopped the perpetrator and got in between them and said 'no you cannot do this, you're hurting her' you know and sort of had to deal with the situation in quite an assertive way to help her feel safe in the image (P7)*

*but it's usually about them getting to a place of safety... and stopping the perpetrator's malice or whatever they're doing rather than actually hurting them, interesting (P8)*

*she was hit over the head by her neighbour with an implement ...she gets these flashbacks of ...getting whacked and when I asked her what would make her feel more protected in that situation, she has a long history of her feeling not protected, she came up with a crash helmet (P3)*

One therapist described how a client gained this sense of safety using humour to change the image to a less harmful image.

*he became this giant guy in a bunny outfit and jumped up on the counter and poked her in the nose with a carrot, and she went from being, sort of 8-9 out of 10 on her SUDS<sup>1</sup> ratings for fear, to laughing and saying oh it's zero, it's just funny (P7)*

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<sup>1</sup> SUDS is a common measurement used in CBT which stands for subjective units of distress

All therapists described in some way how gaining a different perspective of the traumatic event, or the aftermath of the event, can enable an emotional shift. This could happen in several different ways such as gaining a perspective of the dead loved one, or someone else entering the image allowing the client to realise what happened was wrong and they were not to blame.

*because very often the dead person will say to them 'I want you to move on and I want you to have a good life' ... it's almost like hearing that even if they know full well that the person is not saying that, it seems to give them permission to move on, so I think even with the beliefs that block somebody from grieving in the normal way, you can sort of unlock that sometimes using the dead person (P1)*

*I'll come in, I want you to listen to me saying to this, you know 'you're disgusting , you need to get help, you leave this poor person alone, stop hurting them, what's wrong with you, if you don't leave now we're going to do this and that' (P2)*

*you might bring in a compassionate image, literally, an inner helper, a fantasy figure in, saying those words at the time to the person... 'you're not alone, this is not your fault, you don't deserve this' (P4)*

Therapists spoke of this different perspective also coming from the self, such as the older self, the safe self, or the observer perspective. Several explained the powerful effect of the individual taking an observer perspective instead of a field perspective<sup>2</sup>. Three therapists described how drawing or painting the rescript can be a successful method, and although not explicitly mentioned, this unintentionally may be causing distance from the memory. Interestingly, writing or drawing the rescript is often done in nightmare rescripting, something which all therapists claimed to be effective in PTSD.

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<sup>2</sup> The field perceptive is a perspective observed as first person through one's own eyes. The observer perspective is observed as if through the eyes another.

*but there's something about taking the observer perspective that allows people to distance...it just allows you to turn the volume down on the distress... people can think a bit more straight about it, and generally people will be more compassionate towards something they observe than they will be to what they are experiencing, so it allows you to deploy your natural sense of fairness and compassion to a scene, which maybe is harder to do when you're in the middle of it, and if you're feeling ashamed and humiliated (P2)*

*I think there's a massive role for that particularly for people who are blaming... I've done this quite a lot with adults with CSA, and they've felt very guilty and very ashamed and yeah think it's their fault and actually having that observer perspective, I was a kid, I was 5 -6 -7, or even if you're an adult seeing what a vulnerable situation you were in and you're not to blame (P8)*

*you look at it from a distance, you take in more information because all you can really do when you're reliving, is relive the things that you saw ...but when you come from above, you can see that there's no way you could have avoided the car because it was coming at this pace then it came round that corner, so it encapsulates the addition update information (P2)*

*my colleague X she has an example she used... drawing a whole imagery update, so no words were spoken, the person just drew the scenes...because she was an artist, she wasn't getting, she didn't like the other ways...So it was very effective (P4)*

Three therapists seemed very intrigued by the field/observer perspective difference, and two highlighted the role of the observer perspective in ImRs for social phobia. Nonetheless, although the benefits of taking an observer perspective were noted, reluctance was felt by three therapists to stray away from the already established evidence base of using the field perspective in trauma.



*Normally I'd try and encourage people to do a field perspective because we know that that's probably helpful, from the work of Emily Holmes (P8)<sup>3</sup>*

All therapists described trying to achieve the emotional shift in ImRs can be a very experimental and iterative process, with several suggesting the need to persist with the process. Four therapists remarked how when the rescript works, the timing of the shift can be very rapid.

*I remember thinking oh gosh this is not going to work, is it not going to be helpful, but just by persevering and chipping away (P7)*

*it's a bit like trying to plug something in to a socket in the pitch black at night where you've got the plug and you're banging away at it, and you, occasionally you feel one bit of socket and then suddenly it will just go in (P2)*

*I've had people where you do an ImRs and their affect just drops down and it's just a completely different relationship with the memory (P7)*

*sometimes you can take 20 sessions trying to update a cognition for cognitive restructuring ... but sometimes you can have one session of ImRs and it can be so powerful (P8)*

In summary, gaining an emotional shift in ImRs seemed to be the goal therapists aimed to achieve. Many therapists discussed ways to achieve this shift, which could point to possible mechanisms of action in ImRs, but as the next theme will explore, the exact reasons remain relatively unknown.

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<sup>3</sup> Emily Holmes is a Clinical Psychologist who has conducted research into the benefits of adopting a field perspective in treating PTSD (e.g. Holmes et al, 2008)

#### 4. Moving from the unknown to the known

**4.1 Making sense of ImRs.** When giving examples of successful ImRs cases, four therapists acknowledged the false nature of ImRs, but how clients still believed the rescripts, which seemed intriguing and baffling to some.

*although that's not what happened and they know that's not what happened (P7)*

*you can see that in his mind he is having a conversation with his father ... it's fascinating because he knows that he is not, in one part of his head, but he kind of is, you know, because he's conjured it up and it feels so real to him (P1)*

In contending with the false nature of rescripts, therapists stressed the importance of making the new image believable, and tried to make sense of what exactly made it so believable. Therapists described how the new image must have felt believable and contained some personal meaning and emotional resonance, regardless of how fantastical it was; which, of course, links strongly to the theme of ImRs being client-led. A couple of therapists stated it had to sit right with the client's social and cultural beliefs and people's human nature. Three therapists tried to tap into past emotional experiences in the new image so the client could connect with a past feeling.

*[being] comforted by a relative who should have been there for the victim...the rescript was something along the lines of telling the relative what they needed you know, um, you know 'look, I'm injured, I really need you to take care of me'...but actually, it felt quite superficial ... they're never going to change, that's the way they are ...so trying to change people's nature, I don't think, works, it's the believability in that sense (P2)*

*it's got to be personally salient for them(P7)*

*she'd really kind of imagine that beautiful smell and how that made her feel because that kind of reminded her of her mother and nice memories (P8)*

Many examples of rescripting which therapists described involved situations that could not have happened in reality. Three therapists suggested using imagery that is truly fantastical may be more beneficial when considering the retrieval competition theory<sup>4</sup>.

*I quite like the fantastical ones, because I think if it's really memorable it's going to win that retrieval advantage (P4)*

*does it have to abide by the rules of space and time? Absolutely not ... I think often the less it does that better sometimes, because the more captivating it is (P2)*

There seemed to be an ongoing struggle for therapists to determine which theory sufficiently explained the process of ImRs. Several theories were cited to try to understand ImRs, such as the learning theory in deconditioning to stimuli, an increase in perceived control and self-efficacy and changing meta-cognitive appraisals (both discussed above), although the majority referred to the retrieval competition theory .

*there's all kinds of theories, probably the ones I subscribe to are obviously the retrieval competition, I don't think you change the initial memory I think you get something that comes alongside it that starts to balance it out, and I think the other thing that is probably less thought about is kind of the meta-, is sort of the meta-implications, so what does it mean to you about the memory if you're able to create an alternative, it tells you things about the controllability of it, or about your ability to affect how it affects you (P2)*

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<sup>4</sup> Brewin's (2006) 'Retrieval Competition Hypothesis' suggests that psychological techniques working with memories do not directly change memories, but create representations that compete for retrieval.

*the jury's out isn't it, there are two theories, one is you're inhibiting the old ending , and the other is that you're creating a completely new memory, I don't know which it is (P6)*

Two therapists reported in some cases successfully rescripting the memory before the trauma actually occurred. As discussed in the introduction, this involves using ImRs to intervene just before the most distressing part of the trauma. In trying to understand this, they consequently believed it may be the brain creating a new memory, amazing the therapists while also disconfirming other theories.

*I'm inclined to believe it's making a new memory which is marvellous if a little worrying, Interviewer – Why worrying?, Participant – that we have the power to change people's memories (P6)*

*and now more and more there's a possibility that actually you don't even have to go to the worst bit, you just have...stop it before it starts, and that again is a real problem for all the theories... because if that was to work it's neither creating a retrieval competition nor is it de-conditioning nor is it particularly changing meta-beliefs, something else is happening and that's a puzzle actually that if that does work (P2)*

One therapist suggested learning from the effectiveness of other, more alternative, techniques treating PTSD, e.g. the Rewind technique <sup>5</sup>, to develop a more enhanced understanding of the mechanisms of action in ImRs.

*I guess it's worth more exploration because if these things are working rapidly even for some people, they're completely different to what we do at the moment and they*

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<sup>5</sup> The Rewind Technique (Muss, 2002) is a therapeutic technique to treat PTSD which aims process traumatic memories by forming emotional distance from the memory by observing the trauma unfold on a TV screen in both rewind and fast forward.

*tell us something about how the memories are operating is different to what we are assuming (P2)*

**4.2 Looking for structure.** One universal theme emerging from the data was the need for more structure and guidance in using ImRs, with all therapists welcoming a protocol. Specifically, they were looking for more information on what works in ImRs, when it should be used, and for whom. A few reported that some therapists are reluctant to do ImRs without more structure as they do not feel adequately skilled.

*I don't know what the formal way is to use imagery rescripting... to know when in therapy it's most useful, for what types of people (P3)*

*I think more being known about it especially for an experienced therapist will give them more confidence in it, people like to have a protocol almost and I think the fact that it is a little bit kind of you know variable and creative at the moment sometimes puts people off using it, because they're more likely to think I don't know what I'm doing (P1)*

Furthermore, two therapists suggested how increasing training and good supervision would help build people's confidence in the technique.

*a bigger part of people's training would be really helpful...think how many lectures you have on training about verbal reattribution techniques in CBT, have you had lectures on imagery? (P7)*

*often clinicians don't feel skilled enough...it's all well and good doing a bit of a training course but you kind of need supervision to feel more equipped to practise it (P8)*

In order to develop more structure and eventually operationalise ImRs through a protocol, most therapists recognised that more knowledge and evidence for the technique is required.

*we just need to increase the evidence base so we know, kind of who it works for, what the obstacles might be, so we're building up, obviously we've got some out there, but it would be great to be able to increase that, so we know the exact mechanisms as well so we're clear (P8)*

*there's almost no evidence, a few Arnoud Arntz type Merv Smucker papers... but they're mainly about sort of childhood trauma... there's just not enough... we need to get Anke [Elhers] and David [Clark]<sup>6</sup> to do something or Nick [Grey]<sup>7</sup> ... we need that kind of evidence (P6)*

**4.3 Researching ImRs.** During the interviews, several therapists generated ideas for future research in ImRs, which reflected the existence of many unanswered questions.

*I think obviously research almost has to be from the basic end, which is like breaking it down to the very tiny bits and just doing little bits of research on the most basic parts (P2)*

*'it happened and I survived it, and I can survive it with kindness and care', for me is more therapeutic than 'it happened I survived it because I changed the ending in my head'. Now, there's an empirical question there about what's more effective (P4)*

*that would be an interesting thing to research, if field dependency was linked to vulnerability in PTSD (P4)*

*what someone's imagining in their heads is much richer than what's being said ...it definitely is something that should be explored more in research in refugees or people who don't speak English because it seems like quite a good short cut to quite a lot of movement in people's affect without having to talk very much (P6)*

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<sup>6</sup> Professors Anke Elhers and David Clarke are Psychologists who work at Oxford University. They have both made substantial contributions to psychology, especially in CBT, and developed the widely used Cognitive Model of PTSD (Elhers & Clarke, 2000)

<sup>7</sup> Dr Nick Grey is a British Psychologist who works at the Institute of Psychiatry, King's College London. He has made substantial contributions to the field of CBT in PTSD (e.g. Grey, 2013)

*I think something that could be really interesting is to take it to the next step which would be psychodrama, because why not re-enact it, re-enact rescripting, that would be the equivalent of a body update, I would like to see whether that might work (P2)*

Three therapists described trying to document their successful cases in ImRs, and one suggested it was their own professional responsibility to further understand ImRs.

*I've broken down like different types of imagery rescripts, when you might use them, and so on for the people I've been teaching and all of that as I write it it's completely based on my own experiences of what's worked and where (P1)*

*I mean I think we probably need more research on different imagery techniques in terms of different types of images and what to do about them and, you know, it's sort of something perhaps more rigorous, um, yeah so I guess if, I mean that's as much my responsibility as anybody else's (P5)*

Overall, it seemed there was a definite need for more structure and research in the relatively unknown field of ImRs in order to build the confidence of therapists currently using, and those wanting to use the technique, which could ultimately lead to furthering the intervention's success.

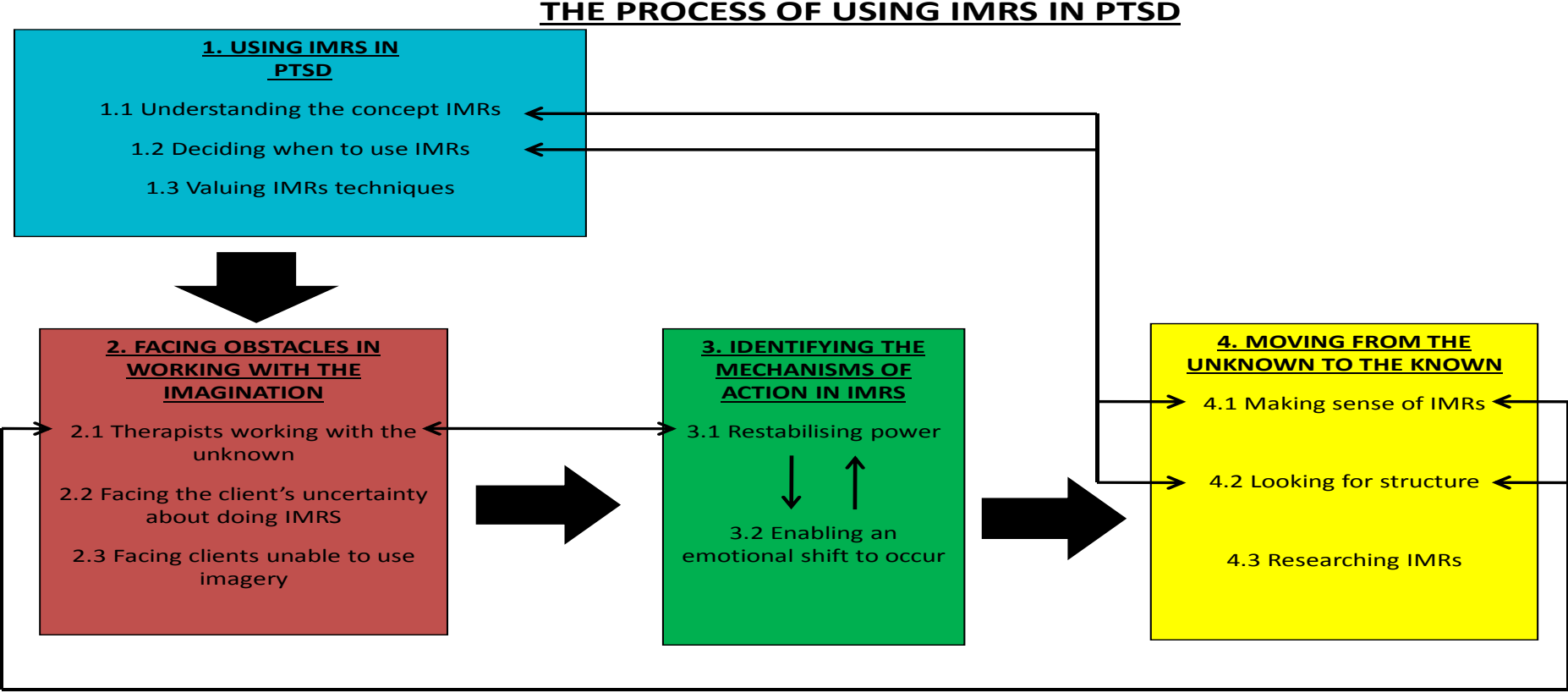
## **Development of a model**

Following GT procedure, a model (Figure 1) was developed to illustrate the process of using ImRs from the therapist's perspective and what they believed made it a successful intervention. This model included themes described above and highlighted any major inter-relationships between themes.

Each box contains the themes, with the different colours representing the different theoretical themes, with the sub-themes underneath. The thick black arrows direct the reader through the process of using ImRs in PTSD. The thin black arrows indicate the bi-directional relationships between each of the sub-themes. One example of such a relationship was in therapists working with the unknown and unpredictable ideas of the client's imagination, this seemed to drive the mechanism of action of re-establishing power, by handing the power back to the client through the open nature of the process. Therapists reported this can be an anxiety-provoking situation so further understanding and structure through a protocol is required to help guide and reassure therapists. The findings, as illustrated in the model, suggested that by developing the research and evidence base it may help further the understanding of ImRs and subsequently allow therapists to feel more comfortable prioritising the technique, and knowing exactly when to use it, and thus ultimately increasing the success of this perceived powerful intervention.



**Figure 1: Model of the process of using ImRs in PTSD**



## Discussion

### Summary of findings

This study aimed to explore what makes ImRs a successful intervention in PTSD by investigating PTSD therapists' views on delivering ImRs and what led to a successful outcome.

The study interviewed eight Clinical Psychologists working in PTSD. The data were analysed and presented using a GT approach which aimed to answer the following research questions:

- a) What is the therapist's experience of delivering IMRs interventions in PTSD?
- b) What do they believe make ImRs a successful intervention in PTSD?

Four theoretical codes were developed from the data, with eleven focused codes. These themes were represented in a model following GT principles (Charmaz, 2006). The main themes were around:

- 1) Using ImRs in PTSD
- 2) Facing obstacles in working with the imagination
- 3) Identifying the mechanisms of action
- 4) Moving from the unknown to the known

The findings demonstrated various inter-relationships operating between themes when considering what makes ImRs a successful intervention. Many of the themes identified surrounded the unknown and power. The unknown was identified both in the unpredictability of working with the imagination, and the modest amount of surrounding research on ImRs in PTSD. Power was identified both in the perceived power of the imagination and the technique, and when re-establishing power for the client. The experience of delivering the technique seemed to have an effect on the success of ImRs; the more confident therapists and those having had a positive experience of the intervention were more able to justify the technique to sceptical clients, experiment with the technique, and feel more comfortable giving the control and power to the clients to use their imagination to create rescripts, and subsequently this handing over of power could be acting as a potential mechanism of action.

A number of factors made ImRs a rarely prioritised intervention, regardless of its perceived effectiveness and therapists enjoying its use. Various obstacles had to be overcome before the intervention could be used, both for therapists and clients. The therapists had to overcome their anxieties of working with an intervention which was relatively novel and involved letting go of control in treatment sessions. In addition, therapists had to overcome clients' concerns in imagining something that had not happened, and the subsequent worries from therapists about invalidating their traumatic experience. A potential change mechanism was related to giving power and control back to the client, both in manipulating the image and within the content of the memory. Another potential mechanism involved getting an emotional shift to occur, which seemed to be what therapists strove for in ImRs. This was achieved through experimenting with a number of images, such as through gaining safety or gaining a different perspective on the traumatic event. Distancing from the memory was another interesting finding potentially adding to ImRs's success, either through writing or drawing out the rescript or taking an observer perspective. Although a seemingly powerful and effective intervention, therapists stressed the need for more research and structure to guide less senior and less confident therapists in this unknown and anxiety-provoking therapeutic technique.

### **Key Findings in Relation to Previous Research and Theoretical Context**

The next section will draw out the main findings from the four themes and relate them to the relevant literature.

**Using ImRs in PTSD.** All therapists unsurprisingly emphasised the prominent role imagery has in PTSD symptoms and treatment. This is emphatically supported by the main bulk of literature on treatment for PTSD, especially within cognitive therapy (Hackmann, Bennet-Levy & Holmes, 2011). The multi-sensory nature of images in re-experiencing symptoms and rescripting was described by therapists, which is reflected in the literature often describing imagery as range of

mental representations which include many sensory qualities (Hackmann et al., 2011). In spite of this, within ImRs therapists often focused on the visual nature of imagery, in line with the frequent visual re-experiencing symptoms of PTSD, (e.g., nightmares and flashbacks) (Hackmann & Holmes, 2004). A suggestion was posed that ability to use visual imagery may actually correlate with PTSD symptoms. In line with this suggestion, a study by Bryant and Harvey (1996), when investigating visual imagery ability in PTSD, discovered it was indeed highly correlated with nightmares and flashbacks. Although this sample was small (only 27 PTSD participants), with a number of methodological limitations, it, along with more historical research, supports the claim that visual imagery ability is associated with PTSD symptoms (Brett & Ostroff, 1985; Stutman & Bliss, 1985). Imagery ability will be discussed further below in facing obstacles, but this research may imply all those with visual PTSD symptoms may inherently have good imagery ability. From their experience of ImRs, therapists suggested visual imagery was the easiest modality to rescript - something that has not been suggested in the literature before - which may be due to a number of reasons. Visual intrusive images are more common, regardless of the trauma, compared to other sensory modalities, such as smell, touch and sound (Elhers et al., 2002; Elhers & Steil, 1995). One therapist suggested this may be because humans hold a wider range of visual images in their memory than, for example, smells. Interestingly, a study by Jones et al. (2003), which aimed to investigate the nature of PTSD over history, reported that visual flashbacks existed more often in the latter part of the 20<sup>th</sup> century. They related this to the introduction of the TV and film, and reported that flashbacks were often described as cinematic experiences “reproducing or cutting back to a scene from the past” (Leys, 2000, p. 241). These suggestions may support the findings that visual images are easier to rescript because we have a constant supply of ever-changing visual images through films and TV, as opposed to smell and touch. Although this certainly needs more investigation, it is an interesting finding nonetheless.

All therapists stated the trans-diagnostic nature of ImRs, supporting the cited literature in the introduction (see Artanz, 2012 for a review). Half the therapists reported using it to treat other

disorders in their alternative roles, which reflects the idea that intrusive and distressing images are a very common feature of many psychopathological conditions (Holmes & Mathews, 2010). With the versatility of the technique being evident, many therapists highlighted the need for a clear definition of ImRs and ways of working with the technique, in order to develop a potentially wide-reaching treatment technique.

In using ImRs in PTSD, therapists reported their reluctance to employ it as a first-line treatment option for several different reasons: ImRs lacking a solid evidence base, the time consuming nature of ImRs, fear of invalidating the traumatic event and keeping ImRs as last option if all else fails. Evidence-base working is a professional standard stressed by the British Psychological Society (1995) and considering the modest evidence-base of ImRs, as opposed to a vast amount of evidence and a developed theory in exposure therapy (Foa, 1986), these findings come as no surprise. Nonetheless, the therapist's professional unease in working with techniques that have partial evidence to support them may be causing this reluctance to prioritise. Consequently, this unease may be having an effect on the success of ImRs, something which will be discussed further.

Therapists highlighted differing practices in ImRs, notably regarding the nature of images used and the point at which they intervened in the rescript. Some therapists were reluctant to use fantasy images or to rescript before the trauma occurred for fear of invalidating the person's experience. Despite this common apprehension, therapists that used these techniques did not share the concern. Arntz et al. (2013) utilised one of these apparent concerning techniques in their study and rescripted events before the trauma took place in a sample of refugees with complex trauma. Not only was the intervention successful, contrary to what these results may imply, there were no drop-outs. Drop-out rates can be very high in PTSD research and some studies have purported figures as high as 54% (Schottenbauer et al., 2008). Therefore these findings may imply this technique was not construed as invalidating. In addition, this technique of rescripting before the trauma occurred may be more helpful when working with some presentations in ImRs, such as those prone to dissociation, a common obstacle to ImRs identified by the therapists. Although, fear of invalidating the traumatic

event was concerning for some, therapists suggested a good standard rationale can overcome this and lead to a more successful outcome in ImRs.

ImRs was reported by therapists to be used more commonly for certain presentations, consistent with the literature, such as: childhood sexual abuse (Smucker et al., 1995), traumatic bereavement (Fidaleo, Proano, & Friedberg, 1999), complex and repeated traumas (Arntz et al., 2013) and nightmares (Long et al., 2010). In addition, therapists reported ImRs to be helpful working with abusive adult relationships as well as childhood sexual abuse. Therapists emphasised the benefits of using the technique for presentations which go beyond just fear, but involve more complex emotions such as shame, humiliation, guilt and powerlessness which may be causing certain traumatic images to remain 'stuck'. The use of imaginal exposure techniques for predominantly fear-based trauma is reflected in the literature (Ehlers, Mayou, & Bryant, 1998; Van Minnen & Hagedaars, 2002). Often many other emotions (e.g. shame, guilt) exist alongside fear in PTSD, when the trauma had an effect on the patient's sense of themselves (Adshead, 2000; Ehlers et al., 1998). If these non-fear based emotions predominate, exposure on its own could be very distressing for the client. Therefore, from this study's findings, it seems ImRs could be an effective first-line intervention for PTSD presentations beyond simply fear. Consequently, it is important to increase the understanding of ImRs so clinicians feel more comfortable using it this way.

Therapists highlighted that their positive experiences and successes using ImRs have encouraged their current use of the technique. This positive attitude towards the intervention may be enabling a positive allegiance with the method, something that has been reported in the literature to influence the effectiveness of treatment (Luborsky, Diguier, McLellan, Woody, & Seligman, 1996). Interestingly, some therapists reported that imagining revenge on perpetrators themselves added to the enjoyment of using ImRs compared with more passive IE work. This is similar to findings by Arntz (2007) who discovered that 4/7 therapists found ImRs to be less emotionally distressing and felt less helpless compared with using other treatment methods. Treating people with PTSD can be very emotionally draining and can increase the risk of vicarious trauma, burnout and compassion

fatigue (Jenkins & Baird, 2002). Consequently, using an intervention that therapists enjoy, not only encourages its use and success, but could make therapists feel less helpless, potentially reducing the risk of burnout and related complications.

**Facing obstacles in working with the imagination.** All therapists acknowledged the gaps in ImRs literature, consistent with a review by Arntz (2012). There seemed to be a struggle with some therapists in wanting to work more with ImRs but not feeling completely comfortable because of the lack of a solid evidence base. In addition, some reported concerns in the perceived power of the technique and the manageability of the affect it generated in the room. Therapists often enter into the profession to help people, and to sit in a room with someone who is actively distressed may seem counter-intuitive, and may even cause therapists to worry about the negative effects of therapy, something which is reported in the literature (e.g., Barlow, 2010). Furthermore, going into the unknown and unpredictable realm of a client's imagination was quite an anxiety-provoking situation for some therapists, especially when working with revenge fantasies. The dilemma surfaced in whether it is safe or indeed helpful to encourage clients to act out aggressive impulses in their imagination, a dilemma reflected in the literature (Seebauer, Froß, Dubaschny, Schönberger & Jacob, 2014). Encouraging aggression may feel counter-intuitive in psychology and professionally risky when we live in a culture of professional litigation 'litigaphobia' (Fulero & Wilbert, 1988). Some studies have investigated the effects of fantasising outcomes, and have suggested some fantasies can be played out, thus supporting the genuine concern of some psychologists in using revenge fantasies (Gregory, Cialdini, & Carpenter, 1982; Libby, Shaeffer, Eibach, & Slemmer, 2007; Milne, Rodgers, Hall, & Wilson, 2008). However, these studies did not investigate revenge fantasies in PTSD but more everyday 'socially acceptable' activities of exercising and voting. Therapists in this study suggested having research to endorse the use of revenge fantasies provided a reassuring presence. Seebauer et al. (2014) discovered revenge fantasies in ImRs did not increase the likelihood of angry emotions compared with a safe place imagery exercise. However, this was an analogue study with a 'healthy' sample, so conclusions should be interpreted with caution as PTSD clients may be

experiencing a much more complex array of emotions and beliefs. In addition, paradoxically, Arntz et al. (2007) discovered that expressing anger through imagery actually led to an increase in anger control and reduced anger overall. The findings of this study suggested therapists expressed caution when using revenge fantasies and although they agreed it may be a helpful technique, for some, the therapist's perception of risk seemed to be an obstacle. Some risk-perception research has shown that the more uncertain we are, the more afraid we may be (Slovic, Fischhoff, & Lichtenstein, 1979). This uncertainty in using revenge fantasies may be causing anxiety and thus affecting the process of ImRs. This area certainly calls for more research, especially in the PTSD population with high levels of anger, to potentially provide further reassurance for therapists if revenge fantasies are indeed an effective strategy.

Therapists described the main concern clients expressed in ImRs was the rescript not matching what actually happened. A good introduction and rationale for the use of ImRs was the main way therapists overcame client doubt. A good rationale in therapy, especially in CBT, is something wholly supported in the literature, however, it can often be a more complex process than initially assumed (Addis & Carpenter, 2000; Hackmann, 2011). Providing a comprehensive explanation and justification seemed pertinent in ImRs owing to numerous client concerns. Using imagery techniques for the first time can be a daunting, confusing and anxiety provoking idea for some clients. This is reflected in a study by Napel-Schutz, Abma, Bamelis and Arntz (2011) where they interviewed patients on their experiences of imagery work in the first phases of Schema Therapy. Factors affecting the patient's capacity to do imagery work included understanding the rationale and remaining concentrated in the imagery; even with a standard introduction, they reported the information was not particularly easy to understand. Arntz (2012) suggested developing a standardised introduction in ImRs to investigate the level of understanding and motivation. Developing an appropriate introduction to ImRs may help reduce both client and therapist's anxiety and thus lead to a more successful intervention. This study highlighted factors which are important to include in an introduction, such as the natural process of ImRs, the power of imagery and fantasy



forward images. These factors can be drawn from the literature, such as the natural process of ImRs being evidenced by many people playing with their own images and imagining alternative outcomes (Bryne, 2005). The power of imagery is illustrated in the study by Rusch et al. (2000), in which people developed distressing images to events that had not even occurred (e.g., after an accident at work one client had intrusive images of his children being injured by a lawnmower). Similarly, Conway et al. (2004) illustrated the power of imagery in a case study of a patient who manipulated his own traumatic image and consequently had flashbacks to an abusive memory where he saw himself as an adult rather than a child and the perpetrator as an old frail man rather than a middle-aged man. His own image manipulation altered the meaning of the event, placing blame on himself as he perceived himself as a willing participant in the abuse. Both pieces of research demonstrated the potential strength of images of events that have not occurred. These factors highlighted by the therapists could help provide a good basis for the rationale and introduction in ImRs and thus improve the success of the intervention.

Other common concerns therapists faced were clients worrying ImRs may erase the memory of the trauma or even 'brainwash' them into thinking it did not happen. In contrast to this thinking, Hagens and Arntz (2012) demonstrated that both IMRs and IE techniques actually caused a superior memory of the event, compared with a neutral positive imagery event. This study suggested ImRs does not erase memories as people may assume, but can actually enhance factual memory by recalling the original event which may even lead to enhance the encoding process.

Therapists reported people's imagery ability presented an obstacle to utilising imagery techniques and thus may influence the success of ImRs. This finding contradicted Hunt and Fenton's (2007) study which found imagery ability did not correlate with outcome - although stressed as a tentative suggestion owing to questionable imagery ability measure. Mental imagery and the imagination are very complex phenomena, with many theories existing that attempt to explain the construction of mental images (Paivio, 1986; Pylyshyn, 1973). The findings of this study support the research in a

natural variation existing in the ability to manipulate and construct vivid images, which can be related both to different cognitive competencies and neural states (Dadds, Hawes, Schaefer, & Vaka, 2004; Marks, 1973). Some therapists hypothesised that people experiencing very visual flashbacks and nightmares must have some imagery ability to be experiencing these intrusions so vividly. Interestingly, Dadds et al.'s (2004) findings are consistent with this idea as they found the ability to imagine vivid images was correlated with higher levels of aversions to people, situations, foods and objects, suggesting people who are high imagers may be more vulnerable to developing PTSD. In contrast, Bryant and Harvey (1996) found that low anxiety participants in their study had more visual images compared to those with PTSD and specific phobias, and actually found the rate of imagery ability decreased as anxiety increased. They hypothesised that those already experiencing very distressing traumatic images may be more prone to avoiding imagery activity. This suggestion needs to be taken into consideration when considering obstacles to using ImRs techniques, as it may not be the client's ability to use imagery techniques per se, but an adopted avoidance strategy effecting the success of ImRs.

**Identifying the mechanisms of action.** The study's findings suggested a mechanism of action in ImRs could potentially be through re-establishing power for the client. Power defined in psychology can be thought of as a one's capability of changing another person's state of mind by supplying or denying resources (e.g., food, affection, money), or administering punishments (Clarke, 1971). The subject of power was discussed by all therapists, both in experiencing lost power from the traumatic event and intrusive PTSD symptoms, and regaining power through ImRs. In re-establishing power in ImRs, therapists described how the client-led nature of ImRs - something which is stressed in Cognitive Therapy (Beck, Rush, Shaw, & Emery, 1979) - may contribute to regaining power, allowing the individual to take a less passive position than normal, using their own ideas to rescript rather than simply responding to a therapist. The importance of client-led interventions is echoed in the literature, describing an encouragement of a state of self-empowerment in the client through their own master skills (Smucker & Dancu, 1999; Rusch et al., 2000). In

addition, Smucker et al. (1995) suggested this enables them more power and control over situations or images in which they felt very helpless and out on control. Developing feelings of power can help to contrast feelings of lost power from being at the mercy of the traumatic perpetrator or situation (Haen & Weber, 2009). Clients regaining power through ImRs is in line with the literature in the introduction which suggests mastery and control may influence outcome in ImRs (e.g., Grunert et al. 2007; Grunert et al., 2003). When specifically considering gaining power and control over the symptoms of PTSD, Rusch (2000) described how intrusive re-experiencing symptoms may cause clients to form negative beliefs about their own control and mental stability. This perceived lack of control may have a knock-on effect and later cause depression and anxiety to develop (Baum, 1990; Rusch et al., 2000; Wells & Papageorgiou, 1995). In Rusch et al.'s (2000) study, patients who were able to gain control over images had more positive beliefs about the amount of control they had, and ultimately about their own mental state. Furthermore, Long (2011) discovered that reductions in levels of perceived incompetence had the strongest relationship with PTSD reduction. This study and the surrounding literature suggest increasing the clients' power and control over PTSD symptoms through ImRs may be adding to the success of ImRs. Moreover, altering self-beliefs about competence and mental stability may be having secondary benefits on PTSD symptomology.

Therapists reported how it was just as important to get control back within the image as well as of the image. This control varied from examples of clients standing up for themselves or being stood up for, doing something they had been unable to do at the time, getting needs met, and taking revenge, again supporting the literature on the benefits of gaining a sense of mastery and control within the image (e.g., Grunert et al., 2007). Gaining control of a situation is possibly in direct contrast to how they felt during the traumatic event (Rusch, Grunert, Mendelsohn, & Smucker, 2000). Holmes, Grey and Young (2005) found that when looking at common themes in traumatic hotspots, thoughts about taking control of the situation (e.g., fighting back) where often it was not possible, were the most common. This lack of control could then lead to feelings of helplessness, and disrupted beliefs about the self and the world. In this study revenge fantasies were a topical subject in ImRs, which is

consistent with the literature suggesting they can be a common manifestation in PTSD (Horowitz, 2007; Orth, Maercker, & Montada, 2003). Therapists differed in their use of revenge fantasies, with some being more reluctant than others. In trying to understand revenge fantasies in ImRs, it may be important to consider current theories. A study by Gollwitzer, Meder and Schmitt (2011) investigated two possible explanations of revenge: the *comparative suffering hypothesis* (seeing the offender suffer a similar fate) or *the understanding hypothesis* (the offender recognising the revenge as a direct result of their behaviour). They discovered the latter hypothesis had much stronger support as an explanation to why people take revenge - with the offender understanding the reasons for the revenge as a direct result of their behaviour. Moreover, they found this type of revenge to be much more satisfying. This may explain why some revenge fantasies in ImRs are not so effective. A successful example of ImRs given by a therapist described a perpetrator who was shamed in a glass box and seemed to recognise the reason for this revenge. The *understanding hypothesis* may explain why that case was so successful as opposed to other revenge fantasies which just enact mere violent actions on others. Seebauer et al. (2014) suggest revenge fantasies can assist in re-gaining lost power, as rage can be a common emotional reaction to helplessness and regaining control of the situation in ImRs through revenge can be therapeutic for some. In addition, positive effects can follow from revenge fantasies, such as re-establishing balance in relationships and reducing shame and self-esteem (Alibhai, 2009). Research proposes that the desire for revenge following feelings of anger does not disappear until it is recognised and released (Fitzgibbons, 1986). Even so, failure to forgive the self or others can maintain anger and rumination over anger (Barber, Maltby, & Macaskill, 2005). This supports some therapists' views in revenge not being the ultimate goal in ImRs. Revenge may indeed help get unmet needs met or gain control of the situation, but some therapists reported that ultimately the anger dissipated through the course of therapy. The findings in this study suggest that revenge in ImRs can be effective in PTSD, however, forgiveness and compassion may also have a role, thus supporting previously cited literature on compassion in ImRs (Wild et al., 2007).

Therapists spoke about clients re-gaining power in their everyday life by learning new life skills in ImRs (e.g., assertiveness). A theory called elaborated intrusions theory (Andrade, May & Kavanagh, 2012; Blackburn, Thompson, & May, 2012) posits that by vividly imagining positive associations with a memory, as opposed to mainly negative associations, it can help the individual develop new more positive goals and boost their motivation to accomplish them. As Artanz (2012) suggests, this theory doesn't directly explain behavioural change in ImRs, but an increase in motivation to reduce avoidance of certain fearful behaviours may lead to trying out other behaviours such as assertiveness. This is another example of the positive effects of regaining power in ImRs and what can help lead to a successful outcome in ImRs.

Many therapists reported imagery work was much more effective in activating emotion than verbal/cognitive work. These findings are reflected in the literature, which describes a phenomenon known as the 'head heart lag'; described in cognitive therapy as a disconnect between what is rationally known with the head and that which is felt with the heart (Stott, 2007). As such, imagery is said to provide an 'affect-bridge' (Watkins, 1971). Therapists suggested ImRs may be a much quicker treatment than verbal strategies. This could be an important finding especially when considering recent demands for cheaper and quicker treatments (Holloway, 2011).

Therapists emphasised the importance of working with the meaning and the sensory elements of traumatic images. The literature reflects the fundamental need to work with the emotional meaning and match this with the ImRs (Hackmann et al., 2011). Often the meaning is challenged first through cognitive work; interestingly, Brewin et al. (2009) did not do this, but successfully worked directly through the imagination. Working thematically with the meaning in one image, like other trauma treatments, may then have a generalising effect on other images. For example, Reynolds and Brewin (1998) found that many of the intrusive images they were working with were not representations of the traumatic incident but instead had strong thematic connections to them. These intrusive images were often accompanied with physical sensations. Therapists highlighted the importance of matching

the new rescript as closely as possible with physical sensations, and environmental cues, so when considering the retrieval competition hypothesis, it can match the retrieval cues and win the retrieval competition.

Therapists emphasised the need for the image to feel safe to enable an emotional shift to occur, and to feel safe a reduction in fear was necessary. Fear reduction is a key factor in treatment for PTSD (Foa & Kozak, 1986). Some research suggests that a reduction in fear can be achieved through the use of humorous and positive imagery in ImRs, as reflected in Rusch et al. (2011). The use of humorous and silly images was something one therapist reported to have effectively reduced fear, by replacing the perpetrator with a person in a big bunny outfit, which instantly made the client laugh and took the terrifying nature out of the traumatic image. Arntz (2012) suggests this works by re-evaluating the fear memory by re-consolidating the memory with a different meaning which does not trigger a strong fear response. Sometimes the emotion and lack of feeling safe can be so overwhelming in PTSD, using ImRs as a means of allowing the person to feel safe in the image first, may be a good way of allowing the emotional shift to occur and the intervention to be successful.

Therapists described ImRs being an experimental process which involved playing with different images and perspectives to help achieve an emotional shift. The differences between the field and observer perspective seemed to be an interesting factor in ImRs. Therapists suggested the benefits of taking an observer perspective in PTSD treatment, consistent with Wild et al. (2007) who suggest that bringing in the older self allowed the individual to gain a wider perspective and feel more compassion towards the individual. Nigro and Neisser (1983) discovered, after taking descriptions of each perspective from participants, that the observer perspective was associated with more peripheral details and self-observations and the field perspective with more emotional reactions and physiological states. A study by McIsaac and Eich (2004) discovered in their PTSD sample that 36% of people experienced intrusive memories as from an observer perspective, and as such, reported feeling less anxiety than those who assumed a field perspective. However, although it may reduce

anxiety in the short term, research suggests that taking an observer perspective can cause emotional avoidance, shown to maintain PTSD (Kenny & Bryant, 2007). In order to challenge the emotional avoidance of the trauma and process emotions, trauma-focused treatment encourages reliving through a field perspective. In addition, Holmes et al. (2008) suggested that people became sadder rather than happier when imagining positive outcomes from an observer perspective, leaving them to feel they had less of a sense of agency and feeling helpless. However, although the literature emphasises the benefits of a field perspective, in contrast, the findings from this study supported the use of the observer perspective. Interestingly, although therapists saw the benefit of the observer perspective, many therapists were reluctant to use this because literature stressed the importance of the field perspective in PTSD. Moreover, therapists described the benefits of drawing out the rescript, again pointing to positive effects of creating distance from the memory in ImRs. Following these findings, an interesting avenue to further investigate would be assessing whether ImRs naturally forces someone into a more distant, observer perspective, as this distance could be adding to the success of the intervention.

**Moving from the unknown to the known.** Therapists acknowledged the false nature of imagery work, and how clients know that the rescript is not what happened in reality but yet they still believed it. Interesting research has shown that similar neural pathways are involved when people imagine the future to when they relive the past (Byrne, Becker, & Burgess, 2007; Schacter, Addis, & Buckner, 2007). This supports the idea that even though the rescript is not real, if it feels real, the brain can believe it to be real. The therapists explained that fantastical images are often used in ImRs because novel images are more likely to win the retrieval competition which is reflected in other studies that have noticed that the images are often scenarios that could not have happened (Brewin et al., 2009). Interestingly, various memory techniques in popular literature advise making memories as novel and captivating as possible in order to remember them: “When we see in everyday life things that are petty, ordinary, and banal, we generally fail to remember them, because the mind is not being

stirred by anything novel or marvellous, but if we see or hear something exceptionally dishonourable, extraordinary, great, unbelievable, or laughable, that we are likely to remember for a long time” (Foer, 2011, p.100). However, although therapists used novel and fantastical images and reported them to be effective, some spoke about how they tried to get in touch with real events and feelings to help build the rescript. We can try to understand this by drawing on a theory known as the ‘constructive episodic simulation hypothesis’ (Schacter, Addis, & Buckner, 2007). This theory suggests that when future events are constructed in the mind, they are formed by flexibly using details from past events. In doing so, information stored in the episodic memory is extracted and recombined to form a novel event (Schacter et al., 2007). This supports the findings in this study that it is difficult to rescript people’s inherent human nature in imagery; presumably because, drawing on this theory, there is no memory of this behaviour, therefore it cannot be used to form a new memory.

Interestingly, as therapists explained, new results in ImRs may be disproving some theoretical models of ImRs. For example, by intervening before the trauma occurred, rather than providing an alternative memory to compete, it is producing a new memory of the event that does not match with the traumatic image. Theories need to progress with these new findings in order to add to the knowledge base in ImRs. Furthermore, therapists spoke of alternative techniques being effectively used in PTSD (e.g., the rewind technique). It was suggested that ImRs should learn and develop from knowledge of these techniques. Interestingly, the rewind technique works by first ensuring the client is in a deep state of relaxation and then instructs them to imagine a safe place where they watch themselves watching their trauma unfold on a TV screen (but not seeing the picture), they then rewind the trauma as if they are a character in a video that is being rewound and then they watch the images on the TV screen on fast forward, this is repeated as many times as necessary until no distressing emotions are evoked (Muss, 2002). Although there is limited space to evaluate such a technique here, it does seem to be utilising similar methods to ImRs which have been identified in this study as adding to the intervention’s success, such as: feeling safe, taking control of the images,



using an observer perspective, distancing from the emotion and using imagination rather than verbal reports.

The findings suggest that there is a need for the technique to progress. But, first there needs to be a greater understanding and wider use of the technique, this ultimately requires the method to have more structure and guidance. The need for a protocol or treatment manual was stressed in all interviews. Psychological therapists are increasingly becoming accustomed to using manuals in their practice, especially within CBT, although controversy around this subject exists (e.g., Addis, 1997). Within ImRs, protocols currently exist for personality disorder (Arntz, 2011), social phobia (Wild et al., 2007) and depression (Wheatley & Hackmann, 2011) but not for more general PTSD.

The findings suggested that several therapists are using their own clinical experience to inform their practice in ImRs. However, as some have suggested, although a common practice in psychology, this way of working may be flawed as it can often be blurred by cognitive biases (Dawes, Faust, & Meehl, 1989). Both the findings and the literature support the need for an ImRs manual to be produced to inform therapist's practice and help further the intervention. Therapists also suggested the need for more training on the technique. Interestingly, Arntz et al.'s (2013) study was able to successfully teach the technique of ImRs in one day of training, demonstrating that ImRs can be disseminated easily and used effectively in a short time period.

### **Overview of the model**

The GT model suggests relationships between the factors associated with using ImRs and what makes it a successful intervention. The model proposed that important processes that add to ImRs's effectiveness included: re-establishing power and enabling an emotional shift to occur, which both operate through a very experimental process. However, in order for the client to regain the power, the clinician must feel confident in delivering the intervention, and able to overcome the

client's scepticism. Despite the success of using the intervention and the positive results both in clinical practice and emerging research, the lack of a solid evidence base and protocol in ImRs could be preventing some therapists from using ImRs more in their practice, which could be affecting the success of the intervention. The literature and research needs to be developed in order to increase the clinician's confidence in the method.

### **Strengths and Limitations of the Study**

The results of this study need to be interpreted with the strengths and limitations in mind, which will now be discussed.

Theoretical sampling is a core feature of GT. For this study, as resources were limited (i.e., time and participants), sampling to illuminate theoretical categories was not possible. However, questions asked in the interview were refined to explore emerging issues to develop the theoretical categories. The amount of experience recruited therapists had working with ImRs could be seen as a strength of this study, but equally could have biased the study, only including those with positive attitudes towards the technique. If more time had been available, theoretical sampling may have involved sampling psychologists with a similar level of expertise in PTSD who did not use ImRs. Moreover, the sample included just clinical psychologists using ImRs within a CBT framework in specialist trauma services, thus limiting external validity and generalisability of the findings to these contexts. Although the original aim was to interview therapists working within primary care services, many of these therapists did not use ImRs. Using ImRs in primary care services with less complex traumas could involve different processes, which may have been an interesting research avenue. In broadening out the sample the model could have been generalised to other contexts and thus more be clinically useful.

Data saturation is another key concept in GT, but due to limited time for this study, data saturation could not be definitively claimed. However, the notion of data saturation is often unclear, and disagreements within grounded theorists exist as to when this occurs (Charmaz, 2006). Working with limited time resources, the focus of the project was to achieve 'theoretical sufficiency' rather than theoretical saturation (Dey, 1999, p.257). The term 'saturation' implies the research has been exhaustive, but as ImRs is such a wide area, it is unlikely the data could be completely saturated. In some studies, the most basic themes emerged after the first six interviews, with complete saturation occurring after 12 (Guest, Bunce, & Johnson, 2006). Therefore, although data saturation cannot be wholly claimed in this study, it must be noted that no new theoretical insights emerged in the last two interviews.

Face-to-face interviewing has its limitations in research, such as participants giving socially-desirable answers or answers to please the researcher (Smith, 1999). For this research therapists might have prepared for the interview and rather than giving answers that relate to their own experience and ideas, they may have been quoting from literature on ImRs. Charmaz (2006) discussed the problems of professionals reciting 'public relations rhetoric rather than reveal personal views' (p27). This seemed to be occurring after the first few interviews, and after a discussion with my field supervisor we adjusted the questions to focus more on real case experiences. Interviewing therapists with whom I worked may have added another layer of social pretence to the interview responses, they may not have wanted to come across as incompetent, hesitant or unknowledgeable in front of a trainee, and thus may not have given authentic responses. However, being an acquaintance of the interviewees was beneficial for recruitment purposes, and established prior rapport and trust may have in contrast led to more honest answers. In addition, audio-recording interviews may have had an influence as "the idea of taping might increase nervousness or dissuade frankness" (Arksey & Knight, 1999, p. 105). Within this study, these potential problems were minimised through emphasising the importance of giving truthful answers, and ensuring their anonymity and the confidential nature of their answers.

Interviewing involved therapists retrospectively recalling clinical cases; this method relies on the individual's memory which is inevitably open to error and bias. Although questions were asked about barriers and examples of unsuccessful ImRs cases, successful cases may have biased their recollection of the technique. In addition, caution must be advised when interpreting themes of power. Although this was a strong theme, with therapists reporting numerous violent stories of clients being over-powered, it may have been a result of therapists only recalling the most horrific cases, thus potentially exaggerating the theme of powerlessness. Within this study there was no obvious way to combat recall bias, except for stressing the importance of discussing a range of cases, something which the questions attempted to prompt.

In terms of prior knowledge, the prior essay reviewing the literature helped lay the foundations of knowledge in ImRs, allowing the researcher to probe into matters relating to details about ImRs. Despite the researcher keeping an 'open mind' and allowing themes to emerge (Dey, 1993, p.229), this prior knowledge may have inadvertently coloured the interviews and data analysis (Charmaz, 2006). In addition, GT is intrinsically subjective as the instrument for analysis is the researcher (Starks & Trinidad, 2007). However, this is acknowledged and transparency is attempted through the researcher owning their own perspective (Elliot et al., 1999). In addition, throughout the study the researcher attempted to 'bracket' this prior knowledge to conduct the analysis (Smith et al., 1999). Overall, GT does not make sweeping assumptions and generalisations but aims to provide a set of concepts and a common language for people to try to make sense of the process of ImRs and potentially improve the effectiveness of the intervention.

The validity of the study was promoted by following qualitative guidelines (Elliott et al., 1999; Henwood & Pidgeon, 1992). Credibility checks were provided throughout the research process to independently verify the codes and the emerging theory and enhance the validity of the study overall. One clinical psychologist, experienced in qualitative methods, checked three coded interview transcripts to ensure evidence of a clear and explicit analytic process and that no obvious themes

were missed. Transcripts and resulting themes were also discussed within a GT peer support group with two fellow trainees using GT methods. In addition, both my academic and field supervisor checked over the results with a transcript to provide further validation for the codes developed and theory constructed (Charmaz, 2006).

Various documentations were kept to ensure transparency of the research process. A reflective diary was kept in order to demonstrate the developments of the study and barriers overcome. In addition, a paper trail was kept to illustrate the analytic process, including examples of memos and a reference table of codes (Appendix 12 &13). Despite trying to 'situate the sample', due to the small size of specialist trauma services and the response content potentially identifying therapists, only limited participant characteristics could be provided to ensure anonymity. Therefore, there may be limits to what readers can infer from the results. Lastly, to promote validity of the model, two participants took part in respondent validation checks. They reviewed the results and the model and gave positive feedback and concluded that this model resonated with their experience of using ImRs.

## **Reflections**

Throughout this project I have reflected on my own background as a white, middle-class, female Trainee Clinical Psychologist working on a placement at a predominantly CBT, specialist trauma centre, and the similarities and differences of those who I interviewed. Many of the therapists were of a similar educational and cultural background as myself. In contrast, many of the specialist trauma centres work with people from different cultural backgrounds, including refugees and asylum seekers. Therefore, considering differing perspectives, I was aware the way we interpret people's difficulties and solutions may be very different to how people of a different cultural background may interpret them. Furthermore, from working in the same professional area as the therapists, I followed Charmaz's (2006) advice in trying to not assume knowledge. Subsequently, I tried to probe the

meaning of certain responses in the interviews, exploring assumed meanings from our shared professional and cultural background.

Initially, it felt strange interviewing therapists who were much more senior than myself; with some therapists having taught me in my various student and clinical positions. This may have influenced the dynamic of the interviews, with therapists adopting a teacher role; I tried to overcome this by focusing on personal examples over the theory of ImRs. In addition, the seniority of the therapists may have influenced my anxiety levels in conducting interviews and thus the nature of the results, preventing me from asking more probing questions and allowing the interview to be more free-flowing. Despite feeling slightly anxious in the first few interviews, I became more relaxed with the more interviews I conducted.

This research also influenced my own clinical practice. I became more interested in asking about images with clients and working therapeutically with them as a way of accessing emotion. In being aware of the success of ImRs from the interviews, I felt more confident using this technique and as such, successfully used it with a client on my PTSD placement.

### **Clinical and Research Implications**

Firstly, this study supports research described in the introduction that ImRs is a powerful and effective intervention to use for PTSD. But rather than gathering this evidence from research samples which are not entirely representative, this study included therapist's reports from a range of cases, including those who do not speak English as a first language (often excluded in research) and other more complex PTSD presentations who may shy away from traditional research as a consequence of shame or suspiciousness.

This study may increase interest, awareness and understanding of ImRs and thus increase the confidence of therapists, potentially encouraging wider use of the method, especially with those who have been hitherto unsure. The model developed may be used as a training tool to educate psychologists who are new to the process of ImRs. More specifically, this study could inform and guide clinicians for which clinical presentations ImRs is best suited, with the results emphasising ImRs works well with presentations that go beyond fear, treating stuck images and with traumatic events such as: sexual abuse, abusive relationships, traumatic bereavement and repeated traumas. It seems well suited to treating presentations of powerlessness by re-establishing lost power through client-led procedures. This research may help clinicians overcome barriers they face when suggesting ImRs to clients, by understanding common reactions to ImRs it can help therapists formulate their own introduction, including information from this study about the power and nature of imagery. These findings may encourage more clinical use of fantastical images and rescripting before the traumatic event occurs in ImRs practices, something which may be currently being avoided. It may also encourage therapists to experiment more with perspectives that create distance from the memory, such as the observer perspective and writing or drawing out the rescript. This study suggested ImRs may be a more enjoyable technique for therapists and may reduce feelings of helplessness. Encouraging the use of ImRs could potentially reduce the risk of compassion fatigue and burnout in PTSD services. If ImRs is as effective as the findings suggest, but structure and confidence in therapists is lacking, providing ImRs training may have wider implications by ultimately reducing costs and waiting list times in NHS services. Interestingly, overall, the findings imply that lack of confidence and structure may be preventing clinicians from using and prioritising ImRs. The need for a protocol was stressed along with a more stable evidence base which will now be discussed.

Due to the rate of treatment resistance in PTSD, the need for more effective interventions always seems welcome (Ursano et al., 2004; Stein et al., 2009). The findings suggest ImRs is an effective intervention, but a more solid evidence-base, such as rigorous randomised controlled trials, is

required before clinicians feel they can use it more often. This study will hopefully stress the need for more research in the field of ImRs for PTSD, with larger, more representative samples. This study may provide information for researchers and clinicians to devise and test the understanding and effectiveness of a standard introduction to ImRs. In addition, it may suggest direction for future research into the mechanisms of action in ImRs, something which is still unclear (Arntz, 2012). Imagery ability was a factor therapists suggested may be impacting on the success of ImRs; this study may encourage the development of a short imagery ability measure given before the start of treatment to investigate if it is indeed related to outcome. The positive results of therapists using ImRs may encourage services and clinical training courses to provide more training on the technique. As discussed this research may inspire the development of a protocol or manual for more junior therapists, this protocol could then be used for research purposes to build the evidence base and increase the use of ImRs.

### **Suggestions for future research**

Several interesting areas for future research have arisen following this study. An interesting area to investigate is the use of ImRs in powerlessness presentations, comparing the level of powerlessness in the traumatic situation to how much power they regain in ImRs. Another avenue may be to compare the effectiveness of the observer versus field perspective in a sample of PTSD with ImRs. Several therapists spoke about the effectiveness of intervening before the trauma occurred and how further research should focus on developing explanatory theories. Relatedly, in using this technique it would be interesting to try to tease out how much reliving must be done before ImRs takes place. It may be interesting to investigate, using a similar design, the patient's experience of ImRs and what they think makes it a successful intervention. Testing different introductions to ImRs and surveying or interviewing participants on their response, could ease therapist's concerns around invalidating experiences with ImRs. Furthermore, investigating the use of revenge fantasies and the effect it has on levels of anger in the PTSD population may be an interesting avenue. And finally,



investigating whether imagery ability has an effect on successful outcome in PTSD may be a helpful area of further research.

## Conclusion

Clearly therapists are very positive about using ImRs, emphasising its perceived success and potency, but it remains a particularly anxiety-provoking technique for some. Research must further investigate suggestions made in this study which have pointed to contributing factors to ImRs's success and potential underlying mechanisms of action, such as gaining power back through revenge fantasies, feeling safe and protected in images, using novel and fantastical images and distancing from the memory through an observer perspective or writing/drawing out the rescript. In addition, structure should be provided for less confident therapists through developing a standard introduction to ImRs and a working protocol for generic PTSD presentations. It seems we are just beginning to uncover the potential far-reaching benefits of rescripting people's disturbing images, which, as this concluding quote perfectly illustrates, is both exciting and unnerving for some.

**Participant (6)**            *Imagery rescripting is marvellous if a little worrying*

**Interviewer**            *Why worrying?*

**Participant (6)**            *that we have the power to change people's memories*

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doi:10.1016/j.beth.2013.10.002

## **Appendix 1: Therapist recruitment letter**

Dear Therapist,

I am a third year Clinical Psychology Trainee at Royal Holloway University. I am in the process of conducting my final year thesis on 'What makes a successful Imagery Rescript in PTSD'. I am hoping to interview experienced PTSD therapists (i.e. 2 + years of working in PTSD) who use imagery rescripting in their practice, and therefore I would like to invite you to take part.

Imagery rescripting has been shown to be an effective treatment method however, more research is required to find out exactly how it works. It is important to gain this deeper understanding in order for the technique to progress. I have chosen to interview therapists to investigate this question, as it is therapists who choose when to deliver the technique, witness the moment-by-moment effect of delivering the intervention and see the change in the clients. Furthermore, in an attempt to bridge the gap between scientist and practitioner, unless directly involved in research, the clinician's experience is often not circulated beyond their clinical base. In addition, at this early stage of research, outcome measures may not be sensitive or specific enough to capture such a broad range of factors.

The study will consist of an interview, roughly one hour long, asking a number of questions about your experience of using Imagery Rescripting and factors that have or have not contributed to treatment outcome.

I have attached the full information sheet and consent form which includes my contact details. Please let me know if you would be happy to take part. I appreciate that you may be very busy with clinical work, so I am happy to come to your base at a time that is most convenient for yourself.

I look forward to hearing from you,

Best wishes

Elle Parker  
Trainee Clinical Psychologist

## Appendix 2: Participant Information Sheet



### Participant Information Sheet

REC number: **13/NW/0432**

Dear Therapist,

I am a trainee studying for a Clinical Psychology Doctorate at Royal Holloway, University of London. For my thesis, I am conducting a research project in which I would like to invite you to participate.

You should only participate if you wish to do so; choosing not to take part will not disadvantage you in any way.

Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Feel free to ask if there is anything that is not clear or if you would like more information.

#### **WHY?**

In this study we are aiming to investigate the therapeutic technique of Imagery Rescripting. For the purposes of this research, Imagery Rescripting will be defined as:

*An intervention which aims to restructure the memory of a certain event through imagery to reduce the associated distress*

You have been invited to participate in this research project as you are an experienced (2+ years) PTSD therapist using Imagery Rescripting in your practice. Imagery rescripting has been shown to be an effective treatment method, however, more research is required to find out exactly how it works. It is important to gain this deeper understanding in order for the technique to progress and for the health service to provide even more effective treatment for people who have experienced trauma. This study will therefore attempt to look in greater detail at what exactly makes imagery rescripting effective.

## HOW?

The study will consist of an interview, roughly an hour long, asking a number of questions about your experience of using Imagery Rescripting and factors that have or have not contributed to treatment outcome. We have chosen to interview therapists as it is the therapists who choose when to deliver the technique, witness the moment-by-moment effect of delivering the intervention and see the change in the clients. Furthermore, outcome measures may not be sensitive or specific enough to capture such a broad range of factors at this early stage of research.

With your permission, I will take an audio-recording of the interview with you, which will then be transcribed. **This data will be kept strictly confidential.** To ensure this, participant numbers will be used instead of names and recordings will be destroyed upon transcription. This way information given cannot be linked back to you. No one other than the researchers will have access to the data collected. The anonymous written transcripts will be kept **on a password protected computer, and** in a secure cabinet in the clinic **that only the researchers can access. They will be destroyed after five years.**

Participation in this study is voluntary. It is up to you to decide whether to take part or not and you have the right to stop the interview at any time without giving a reason. You may also withdraw your data from the study after participation up until it is transcribed for use in the final report. Leaving the interview and/or withdrawing the data will have no negative consequences.

I can be contacted using the following e-mail addresses:

Elle Parker - [eleanor.parker.2011@rhul.ac.uk](mailto:eleanor.parker.2011@rhul.ac.uk)

Or, leave a message on our answer machine on the number below with your name and contact number, and we will return your call as soon as possible: **01784 472746**

Thank you for your time,

Elle Parker

Trainee Clinical Psychologist

## Appendix 3: Participant Consent Form



Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: An investigation into what makes Imagery Rescripting a successful intervention

College Research Ethics Committee Ref: **13/NW/0432**

Thank you for considering this research project. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

- *I understand that if I decide at any other time during the research that I no longer wish to participate in this project, I can notify the researchers involved and be withdrawn from it immediately.*
- *I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998*
- *I agree for the researcher to audio record and transcribe the interview*

### Participant's Statement

I \_\_\_\_\_ agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed

Date

### Investigator's Statement:

I \_\_\_\_\_ confirm that I have carefully explained the nature, demands and any foreseeable risks (where applicable) of the proposed research to the volunteer.

Signed

Date

## Appendix 4: Demographics Questionnaire

Please take a moment to complete the following demographics questionnaire.

Please CIRCLE relevant answers.

**Age:** 25-34 35-44 45-54 55-64 65-74

**Job title:** \_\_\_\_\_

**Service:** Primary Care  
Secondary Care (Community)  
Secondary Care (Inpatient)  
Specialist Service  
Other

**Sex:** Male Female

**Nationality:** \_\_\_\_\_

**Number of years qualified:** \_\_\_\_\_

**Number of years working in PTSD:** \_\_\_\_\_

**How often do you use Imagery Rescripting with your clients?**

- Once/twice a week
- A few times a month
- Once a month
- Once every 2 months
- Once every few months
- Once every six months
- Rarely
- Never

**Any further training on Imagery Rescripting:** YES NO (If yes, please detail below: title and length of training): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Thank you for your time**

## **Appendix 5: Excerpt from Research Diary**

### **20<sup>th</sup> February 2014 – Presentation to IAPT team**

I went to present my study today to a team of Primary Care IAPT (Improving Access to Psychological Therapies) therapists who were receiving specialist PTSD supervision from a Senior Clinical Psychologist at my placement. They were all very open and keen to hear about my study and the recruitment and so I was very hopeful when I arrived. However, after presenting the study they asked lots of questions about the nature of ImRs such as what constitutes an image, (i.e., is it just visual or does it include other sensory elements). They also asked questions around what the definition of ImRs was and what the difference is between updating and rescripting. These questions at the time were quite challenging and although I did my best to answer them I had to speak to my field supervisor following this presentation to ensure I answered to the best of my knowledge. If I had not have done prior research into the field I would not have been able to answer these questions. It made me think about how little people know about ImRs in Primary Care IAPT services, whether this is a reflection of this team or the wider service context.

Following my presentation, the majority of therapists admitted that they had not used ImRs in PTSD and did not know much about it. Only the most senior clinician had used ImRs for a child abuse survivor and one other clinician had used it to treat a case of social phobia. Many had not had training on ImRs and did not feel confident using it in their treatment. I thought this was very interesting and may reflect my later findings in the project that it was a technique that many did not have to confidence to use.

Following this presentation I had to re-think my recruitment strategy. I had planned on recruiting from primary care services in order to get a varied sample of therapists treating a variety of complexities of PTSD, but from this presentation it appeared that it was a technique that was used less often with more simple, less complex PTSD.

### **March 12<sup>th</sup> 2014– Participant Interview**

Today I interviewed one of my participants. They were very helpful and it was a very interesting interview. However, it was someone who had taught me as a trainee before. It therefore immediately took the dynamic of teacher student role. The interview content became quite factual with lots of the literature and theories being referenced. I tried to overcome this by directing more questions to focus on their own experience of using the technique and why they think it worked. After this interview I spoke to my field supervisor about this who recommended I do something similar. He advised me to be asking questions about successful/unsuccessful cases and what they hypothesised to be the factors accounting for that change, not specifically focussing on theories. But also to focus on developing



themes and trying to exhaust all properties of the themes by finding exceptions and almost challenging therapists by giving one opinion so they would give another. This felt quite anxiety provoking at first, the thought of questioning someone who was much more senior on why their motivations for doing something. I reflected this back to my supervisor and we discussed how this may be my own feelings about not wanting to upset therapists after they had taken the time to agree to take part in this research. I therefore to agreed to try to adopt this line of questioning in future.

### **March 26<sup>th</sup> 2014– Participant Interview**

Today I had an interview with a therapist who worked mainly with refugees and asylum seekers. We got onto the topic of cultural values and our assumptions of how people may not want to use fantastical images in ImRs because of their beliefs. It made me question our assumptions as middle class white British females and how we assume other cultures may be against doing fantasy work. It also made me think that all my interviews have been with the therapists form the same background as myself, but a lot of clients that are being treated with PTSD are from very different cultural backgrounds. I wondered how they perceive using these techniques and thought to myself that this may be an interesting research avenue, whether they would agree with some of the therapist's assumptions. It also made me aware of the class/cultural differences between many of the clients and therapists and I wondered how someone from a different class/culture would interpret these interviews.

## Appendix 6: NHS Research Ethics Committee (REC) approval letter



National Research Ethics Service *Health Research Authority*

### NRES Committee North West - Lancaster

HRA NRES Centre - Manchester  
Barlow House  
3rd Floor  
4 Minshull Street  
Manchester  
M1 3DZ

Telephone: 0161 625 7818  
Facsimile: 0161 625 7299

22 May 2013

Miss Caroline Salter  
Department of Clinical Psychology  
Department of Psychology  
Royal Holloway, University of London  
Egham  
TW20 0EX

Dear Miss Salter

**Study title:** What makes a good imagery rescript: Using verbal analysis to investigate the characteristics required to make a successful rescript in a clinical sample

**REC reference:** 13/NW/0432

**IRAS project ID:** 124012

The Proportionate Review Sub-committee of the NRES Committee North West - Lancaster reviewed the above application on 22 May 2013.

We plan to publish your research summary wording for the above study on the NRES website, together with your contact details, unless you expressly withhold permission to do so. Publication will be no earlier than three months from the date of this favourable opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to withhold permission to publish, please contact the Co-ordinator Mrs Carol Ebenezer, [nrescommittee.northwest-lancaster@nhs.net](mailto:nrescommittee.northwest-lancaster@nhs.net).

### Ethical opinion

The Committee commented that this is a well thought through application. On behalf of the Committee, the sub-committee gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

## Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see “Conditions of the favourable opinion” below).

### Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

*Management permission (“R&D approval”) should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.*

*Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.*

*Where a NHS organisation’s role in the study is limited to identifying and referring potential participants to research sites (“participant identification centre”), guidance should be sought from the R&D office on the information it requires to give permission for this activity.*

*For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.*

*Sponsors are not required to notify the Committee of approvals from host organisations.*

**It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

**You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. The REC will acknowledge receipt and provide a final list of the approved documentation for the study, which can be made available to host organisations to facilitate their permission for the study. Failure to provide the final versions to the REC may cause delay in obtaining permissions.**

### Approved documents

The documents reviewed and approved were:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Evidence of insurance or indemnity		
GP/Consultant Information Sheets	1	01 March 2013
Investigator CV	Salter	
Investigator CV	Brown	
Investigator CV	Parker	
Investigator CV	XXX	

Investigator CV	XXX	
Other: Post interview information sheet	1	01 April 2013
Other: Impact of Event Scale		
Other: Patient Health Questionnaire-9		
Other: Weekly rating of intrusive memories/images		
Other: Clarification of sponsor		
Participant Consent Form	1	01 May 2013
Participant Information Sheet	1	01 May 2013
Protocol	1	01 March 2013
REC application	3.5	01 May 2013

## **Membership of the Proportionate Review Sub-Committee**

The members of the Sub-Committee who took part in the review are listed on the attached sheet.

## **Statement of compliance**

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

## **After ethical review**

### Reporting requirements

The attached document “After ethical review – guidance for researchers” gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

### Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

information is available at National Research Ethics Service website > After Review

**13/NW/0432  
correspondence**

**Please quote this number on all**

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at <http://www.hra.nhs.uk/hra-training/>

With the Committee's best wishes for the success of this project.

Yours sincerely

A handwritten signature in black ink, appearing to read 'L Booth', written in a cursive style.

**Dr Lisa Booth**  
**Chair**

Email: [nrescommittee.northwest-lancaster@nhs.net](mailto:nrescommittee.northwest-lancaster@nhs.net)

*Enclosures:*  
*review*

*List of names and professions of members who took part in the*

*“After ethical review – guidance for researchers” [\[SL-AR2\]](#)*

*Copy to:*

*Dr Gary Brown*  
*Ms Gill Dale, South London And Maudsley NHS Foundation*  
*Trust*

## Appendix 7: Departmental Ethical Committee Approval

**From:** Psychology-Webmaster@rhul.ac.uk [mailto:Psychology-Webmaster@rhul.ac.uk]  
**Sent:** 06 August 2013 12:52  
**To:** nwjt089@rhul.ac.uk; Brown, Gary  
**Cc:** PSY-EthicsAdmin@rhul.ac.uk; Leman, Patrick  
**Subject:** Ref: 2013/010 Ethics Form Approved

### Application Details:

Applicant Name: **Caroline Salter/ Eleanor Parker**

Application title: **Characteristics of a successful imagery re-script**

Comments: Approved. (Reviewers' feedback is given, below, for your information).

#### Reviewer 1.

Ethical issues for this study have clearly been carefully considered, and ethical approval has already been obtained from NHS ethics. I have just a couple of minor comments:

Section 5: How many years should the transcriptions be kept for following study completion?

Information sheet: On page 2, para 2, 'All the information we do collect will stored' should be 'All the information we do collect will be stored'.

Consent form: It is mentioned that the therapist would obtain consent from participants. It wasn't clear who would be signing the consent forms. It might be ideal if both the therapist and one of the researchers sign the form. It's fine for the researcher to sign the form at a later date after receiving the forms from the therapist.

#### Reviewer 2.

Minor points: Length of time following which transcriptions will be destroyed is missing from section 5 (but information sheet says two years). Phone number missing from information sheet.

Despite the sensitive nature of this study, the ethical issues appear to have been considered fully and addressed carefully and I have no additional concerns.

## Appendix 8a – Local R&D approval

South West London and St. George's   
Mental Health NHS Trust

### Research and Development

**R&D Director:** Dr Niruj Agrawal  
c/o SECTION OF MENTAL HEALTH, PHSE DIVISION  
HUNTER WING  
CRANMER TERRACE  
LONDON SW17 0RE

**R&D Co-ordinator:** Ms Enitan Eboda

**E-mail:** [eeboda@sgul.ac.uk](mailto:eeboda@sgul.ac.uk)

**Direct Line:** 020 8725 3463/2783

**Fax:** 020 8725 3538/2914

Miss Caroline Salter

Department of Clinical Psychology,  
Royal Holloway, University of London,  
Egham Hill  
Surrey  
TW20 OEX

28 August 2013

Dear Caroline,

**Research Title:** What makes a good imagery rescript: using verbal analysis to investigate the characteristics required to make a successful rescript in a clinical sample.

**Principal Investigator:** Miss Eleanor Parker

**Project reference:** PF569

**Sponsor:** Royal Holloway, University of London

Following various discussions your study has now been awarded research approval. Please remember to quote the above project reference number on any future correspondence relating to this study.

Please note that, in addition to ensuring that the dignity, safety and well-being of participants are given priority at all times by the research team, host site approval is



subject to the following conditions:

In addition to ensuring that the dignity, safety and well-being of participants are given priority at all times by the research team, you need to ensure the following:

- The Principal Investigator (PI) must ensure compliance with the research protocol and advise the host of any change(s) (eg. patient recruitment or funding) by following the agreed procedures for notification of amendments. Failure to comply may result in immediate withdrawal of host site approval.
- Under the terms of the Research Governance Framework, the PI is obliged to report any adverse events to the Research Office, as well as the REC, in line with the protocol and sponsor requirements. Adverse events must also be reported in accordance with the Trust Accident/Incident Reporting Procedures.
- The PI must ensure appropriate procedures are in place to action urgent safety measures.
- The PI must ensure the maintenance of a Trial Master File (TMF).
- The PI must ensure that all named staff are compliant with the Data Protection Act, Human Tissue Act 2005, Mental Capacity Act 2005 and all other statutory guidance and legislation (where applicable).
- The PI must comply with the Trust's research auditing and monitoring processes. All investigators involved in ongoing research may be subject to a Trust audit and may be sent an interim project review form to facilitate monitoring of research activity.
- The PI must report any cases of suspected research misconduct and fraud to the Research Office.
- The PI must provide an annual report to the Research Office for all research involving NHS patients, Trust and resources. The PI must also notify the Research Office of any presentations of such research at scientific or professional meetings, or on the event of papers being published and any direct or indirect impacts on patient care. This is vital to ensure the quality and output of the research for your project and the Trust as a whole.
- Patient contact: Only trained or supervised researchers holding a Trust/NHS contract (honorary or substantive) will be allowed to make contact with patients.
- Informed consent: is obtained by the lead or trained researcher according to the requirements of the Research Ethics Committee. The original signed consent form should be kept on file. Informed consent will be monitored by the Trust at intervals and you will be required to provide relevant information.
- Closure Form: On completion of your project a closure form will be sent to you (according to the end date specified on the R & D database), which needs to be returned to the Research Office.
- All research carried out within South West London & St George's Mental Health NHS Trust must be in accordance with the principles set out in the Department of Health's Research Governance Framework for Health and Social Care 2005 (2nd edition).

Failure to comply with the conditions and regulations outlined above constitutes research misconduct and the Research Office will take appropriate action immediately.

Please note, however, that this list is by no means exhaustive and remains subject to change in response to new relevant statutory policy and guidance. If you have any

queries regarding the above points please contact Enitan Eboda, R&D Co-ordinator, on 020 8725 3463 (St. George's), e-mail: eeboda@sgul.ac.uk.

Yours sincerely,



Agrawal

Dr Niruj

**Research & Development Director**  
**Chair, Research & Development Committee.**

Cc: Miss Eleanor Parker, Royal Holloway, University of London

16 December 2013

## Appendix 8b: Local R& D Approval

Ms Caroline Salter  
 Department of Clinical Psychology  
 Royal Holloway, University of London  
 Egham  
 TE20 0EX

Dear Ms Caroline Salter

I am pleased to confirm that the following study has now received R&D approval, and you may now start your research in the trust identified below:

Study Title: What makes a good image rescript: Using verbal analysis to investigate the characteristics required to make a successful rescript in a clinical sample R&D reference: Non CSP 124012 REC reference: 13/NW/0432		
This NHS Permission is based on the REC favourable opinion given on 22 May 2013 and the most recent amendment submitted to REC on 04 October 2013		
Name of the trust	Name of current PI/LC	Date of permission issue(d)
Camden & Islington NHS Foundation Trust	Ms Eleanor Parker	16 December 2013
If any information on this document is altered after the date of issue, this document will be deemed INVALID		

Specific Conditions of Permission (if applicable)
This letter gives NHS permission for you to conduct your study detailed above in the following location :  Traumatic Stress Clinic, 4 <sup>th</sup> Floor, St. Pancras Hospital, St. Pancras Way, London, NW1 0PE
If any information on this document is altered after the date of issue, this document will be deemed INVALID

Yours sincerely,



Angela Williams  
 Head of Research & Development

Cc: Ms Eleanor Parker (Principle Investigator)

Dr Gary Brown, Royal Holloway, University of London (Sponsor Contact)

## noclor

Research Support Service

Bedford House, 3rd Floor  
125-133 Camden High Street  
London, NW1 7JR

Tel: 020 3317 3045  
Fax: 020 7685 5830/5788  
[www.noclor.nhs.uk](http://www.noclor.nhs.uk)

May I take this opportunity to remind you that during the course of your research you will be expected to ensure the following:

- **Patient contact:** only trained or supervised researchers who hold the appropriate Trust/NHS contract (honorary or full) with each Trust are allowed contact with that Trust's patients. If any researcher on the study does not hold a contract please contact the R&D office as soon as possible.
- **Informed consent:** original signed consent forms must be kept on file. A copy of the consent form must also be placed in the patient's notes. Research projects are subject to random audit by a member of the R&D office who will ask to see all original signed consent forms.
- **Data protection:** measures must be taken to ensure that patient data is kept confidential in accordance with the Data Protection Act 1998
- **Health & safety:** all local health & safety regulations where the research is being conducted must be adhered to.
- **Serious Adverse events:** adverse events or suspected misconduct should be reported to the R&D office and the Research Ethics Committee.
- **Project update:** you will be sent a project update form at regular intervals. Please complete the form and return it to the R&D office.
- **Publications:** it is essential that you inform the R&D office about any publications which result from your research.
- **Ethics:** R&D approval is based on the conditions set out in the favourable opinion letter from the Research Ethics Committee. If during the lifetime of your research project, you wish to make a revision or amendment to your original submission, please contact both the Research Ethics Committee and R&D Office as soon as possible.
- **Monthly / Annually Progress report:** you are required to provide us and the Research Ethics Committee with a progress report and end of project report as part of the research governance guidance.
- **Recruitment data:** if your study is a portfolio study, you are required to upload the [http://www.cancer.nhs.uk/about-us/processes/portfolio/p\\_recruitment/](http://www.cancer.nhs.uk/about-us/processes/portfolio/p_recruitment/) recruitment data on a monthly basis in the website.
- **Amendments:** if your study requires an amendment, you will need to contact the Research Ethics Committee. Once they have responded, and confirmed what kind of amendment it will be defined as, please contact the R&D office and we will arrange R&D approval for the amendment.
- **Audits:** each year, noclor select 10% of the studies from each service we have approved to be audited. You will be contacted by the R&D office if your study is selected for audit. A member of the governance team will request you complete an audit monitoring form before arranging a meeting to discuss your study.

## Appendix 9 - REC Approval of Substantial Amendment

### National Research Ethics Service

#### NRES Committee North West –Lancaster

3rd Floor  
Barlow House  
4 Minshull Street  
Manchester  
M1 3DZ

Telephone: 0161 625 7434

29 January 2014

Miss Caroline Salter  
Department of Clinical Psychology  
Department of Psychology  
Royal Holloway, University of London  
Egham  
TW20 0EX

Dear Miss Salter

<b>Study title:</b>	<b>What makes a good imagery rescript: Using verbal analysis to investigate the characteristics required to make a successful rescript in a clinical sample</b>
<b>REC reference:</b>	<b>13/NW/0432</b>
<b>Protocol number:</b>	<b>N/A</b>
<b>Amendment number:</b>	<b>2</b>
<b>Amendment date:</b>	<b>22 January 2014</b>
<b>IRAS project ID:</b>	<b>124012</b>

- To use a qualitative approach to explore PTSD therapists views

The above amendment was reviewed by the Sub-Committee in correspondence.

#### **Ethical opinion**

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

## Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Protocol	3	22 January 2014
Participant Consent Form	1	22 January 2014
Interview Schedules/Topic Guides	1	22 January 2014
Notice of Substantial Amendment (non-CTIMPs)	2	22 January 2014
Participant Information Sheet	1	22 January 2014

## Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

## R&D approval

All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.

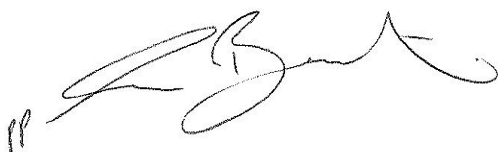
## Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at <http://www.hra.nhs.uk/hra-training/>

<b>13/NW/0432:</b>	<b>Please quote this number on all correspondence</b>
--------------------	---

Yours sincerely



**Dr Lisa Booth**  
**Chair**

E-mail: [nrescommittee.northwest-lancaster@nhs.net](mailto:nrescommittee.northwest-lancaster@nhs.net)

Copy to: *Ms Enitan Eboda, South West London and St Georges Mental Health NHS Trust*  
*Dr Gary Brown*

## Appendix 10a: Local R&D Approval (following the amendment)

**From:** Edgeworth Julie (CENTRAL AND NORTH WEST LONDON NHS FOUNDATION TRUST)  
<j.edgeworth@nhs.net>  
**Sent:** 05 February 2014 09:37  
**To:** Parker, Eleanor (2011)  
**Cc:** Brown, Gary; Salter, Caroline (2011)  
**Subject:** Amendment approval

Dear Eleanor,

<b>Study title:</b>	What makes a good imagery rescript: Using verbal analysis to investigate the characteristics required to make a successful rescript in a clinical sample
<b>R&amp;D /CSP number:</b>	<b>Non CSP 124012</b>
<b>REC number:</b>	<b>13/NW/0432</b>
<b>Date amendment submitted to REC</b>	<b>22<sup>nd</sup> January 2014</b>

Following review of the amendment for the above study which has been reviewed by the **NRES Committee North West - Lancaster, Camden and Islington NHS Foundation Trust** has decided that they can accommodate this amendment subject to any conditions set out in the REC letter of **29<sup>th</sup> January 2014**.

The amendment may therefore be immediately implemented at this site under the existing NHS Permission.

Kind regards,

Jules

**Dr Julie Edgeworth**  
**Research Governance Officer | Research & Development**  
**noclor**

**t: 020 7685 5965 | f: 020 7685 5788**

3<sup>rd</sup> Floor Bedford House | 125-133 Camden High St | London | NW1 7JR

**w: <http://www.noclor.nhs.uk/>**



## Appendix 10b: Local R&D approval (following amendment)

Miss Eleanor Parker  
Royal Holloway University of London  
Department of Clinical Psychology  
Egham Hill  
Egham  
Surrey TW20 0EX

**Research & Development**  
Fitzwilliam House • Skimped Hill Lane  
Bracknell • Berkshire • RG12 1BQ  
t: 01344 415825  
f: 01344 415666  
e: [bht@berkshire.nhs.uk](mailto:bht@berkshire.nhs.uk)

date: 1 April 2014

Our Ref: 2014/26                      REC Ref: 13/NW/0432

Study title: Characteristics of a successful imagery rescript

Start date: 1/04/2014                      End date: 2/06/2014

Dear Miss Parker

### Confirmation of Trust Management Approval

On behalf of Berkshire Healthcare NHS Foundation Trust, I am pleased to confirm Trust Management Approval for the above research on the basis described in the application, protocol and other supporting documents. Approval is conditional on reporting up-to-date recruitment when requested and the submission of a brief final report of research findings. Failure to do so may result in approval being withdrawn.

If there are any changes to the study protocol, the R&D Department must be informed immediately and supplied with any amended documentation as necessary, including confirmation that the amendments have been favourably reviewed by the Sponsor and the Ethics Committee. If the end date changes from that shown above, then please inform BHFT R&D Manager. Trust approval will cease on the end date above. Please contact the R&D Manager to discuss any extension.

The R&D Department is required to monitor the progress of all research in the Trust under the Department of Health's Research Governance Framework. You will be contacted in due course with a request for reports of progress, and for a brief final report of research findings.

If you have any questions about the above, or you require any other assistance, then please contact the R&D Department.

I wish you every success with the study.

Yours sincerely

Dr Justin Wilson  
Medical Director

## Appendix 11: Interview Preamble

Throughout this interview I will be asking you questions about the treatment technique known as “Imagery Rescripting”. For the purposes of this research, Imagery Rescripting will be defined as **the intervention which aims to restructure the memory of a certain event through imagery to reduce the associated distress.**

Although I will be asking general questions on your experience of delivering IMRS interventions, if you have case study examples, please feel free to illustrate your points with case examples.

## Appendix 12: Interview Schedule

### Part A

#### Initial open ended questions

**What has been your experience of using IMRS?** (PROMT: 1. How long have you been using it? 2. How do you find using it? 3. What is your impression of its effectiveness?)

**How often do you use IMRs in your practice?** (PROMPT: everyday/once a week/month/year)

**When do you decide to use IMRs in therapy?** (PROMPT: 1. At what stage in therapy 2. For what reason? 3. With which client group? )

#### Intermediate questions

##### Mechanisms

**How do you think IMRs works as an intervention?** (PROMPTS: 1) mechanisms of action? 2) what factors add to its effectiveness? )

**What do you think makes a successful re-script?** (PROMPT: i.e. what makes the new story/script work ? : If a) believable - What makes a rescript believable? B) If vividness – what makes it vivid? (i.e. closing eyes, using all the senses) 3) practice at home?

**How do you know when IMRS has been a successful intervention?**

**What change do you notice in the client when using IMRs ?** (PROMPT: 1. Instant change: Change in the room -What do you notice in the room when it has been a successful/unsuccessful intervention, specific change? (e.g. change in affect) 2. What symptomatic changes do you see in your patients after using IMRs (e.g. flashbacks, nightmares, avoidance, negative thoughts) 3. Changes in life – any other changes they notice outside of the therapy room – (e.g. better at coping, feel happier, more in control, increase in trust

**How quickly do you see the change occur?** (minutes/days/weeks)

**At what point in the trauma do you decide to rescript/how do you decide this?** (e.g. before the trauma occurred/after the trauma?)

#### Moderators (characteristics which may influence change)

**What makes someone more receptive to IMRS? Are there particular characteristics which may influence change when using IMRs?** (PROMPTS 1.Does it seem to work more effectively with some clients (typical client/client group?) 2. Does it seem to work more effectively with certain traumas? (single episode/ multiple traumas, CSA/torture) 3. Does it seem to work more effectively on specific emotional reactions (e.g. anger/guilt/hopelessness)

**How do you introduce the technique?** (PROMT: do you have any preparatory exercises) **Do you feel the introduction has any influences on the outcome?**

## Barriers

### **Are there any barriers to using this intervention? How do you overcome these?**

(PROMT/FOLLOW UP QUESTIONS: 1. What happens when some clients don't understand /want to do it? 2. How do you know when it is not working 3. How much prompting/imagery suggestions to you have to do? 4. Any social/cultural/environmental constraints.)

## Ending questions

**How do you feel delivering IMRs techniques?** (PROMPT 1. compared with other PTSD techniques such as reliving?)

**What changes do you think should be made to make IMRs a more effective intervention?**

## Appendix 13: Adapted Interview Schedule

### Part A

#### Initial open ended questions

**What has been your experience of using IMRS?** (PROMTs : 1. How long have you been using it? 2. How do you find using it? 3. What is your impression of its effectiveness?)

**Why do you decide to use ImRs in therapy?** (PROMPT: 1. At what stage in therapy? 2. For what reason? With which client group?)

**Have there been times where you've used it as a first intervention?** If not, why not?

#### Intermediate questions

**Can you give me an example of a clinical case when ImRs was particularly successful?** (What do you think caused it to be so successful?)

**Can you give me an example of a clinical case when ImRs was not so successful?** (why do you think it was unsuccessful? Is there anything that could have improved its effectiveness?)

**Most people have identified IMRs being helpful in these areas of PTSD: CSA, DV, nightmares, traumatic bereavement – why do you think that is?**

**Why is it used for STUCK images? Why does it work so well with horrific images?**

**How do you get an image to feel REAL/ believable to the client? Why do you think images that couldn't happen in reality are used in IMRs?**

**Why you think IMRs is particularly good for powerlessness? (CSA, DV, sexual abuse)**

**How do you think taking an observer perspective (as opposed to field) in IMRs adds to the IMRs?** (What do you think the technique of bringing in the older self does in IMRs?)

**Why do you think images are easier to control than some other senses (e.g. tastes)?**

**What are your views on revenge fantasies?**

**How do you know when IMRs has been successful? How quickly do you see the change occur?**

**Do you ever rescript before the trauma happened?**

**Are there any obstacles to using IMRs?**

**Why can't some people get images in their mind?**

**How do you keep track of what worked/didn't work in treatment with IMRs?**

**What do clients like about rescripting?**

**How do you find using ImRs with people from different social/cultural backgrounds?**

Ending questions

**How do you feel delivering IMRs techniques?** (How does it feel going into the unpredictable world of someone's imagination?/ handing over the power and control to the client?)

**What changes do you think should be made to make IMRs a more effective intervention?**

**Anything else I should know?**

## Appendix 14: Excerpt of Transcript and Coding

Transcription extract – Participant one (including line numbers)	Open coding	Comments and thoughts for memos
<p>305 Int- I suppose something that's come up a few times is the unpredictability of            306 how it can go</p> <p>307 P – yeah, and that's kind of fun, but yeah it is also occasionally, you don't really            308 know what's going to happen, and sometimes, most times it goes as you would            309 imagine or as you'd planned or anticipated but other times it does go completely            310 somewhere else, because once someone is in they want to do different things to            311 what you'd thought or they really can't access something and you have to kind of,            312 sometimes you end up staying with it for quite a long time and shifting things in            313 different ways almost kind of experimenting with it to try and get the felt self            314 that you're looking for.</p> <p>315 Int- can you remember an example of when it hasn't gone well</p> <p>316 P – yeah, oh yeah, I think with the child abuse stuff, there's a lady I've been            317 working with, still working with, who um had very chronically deprived care giving            318 and you know when we first tried to bring her in as her adult self, to comfort the            319 younger self and she just couldn't do it, or switching between the selves and she            320 was just becoming more and more distressed, you know, when she was her</p>	<p>Enjoying IMRs</p> <p>Entering into the unknown</p> <p>Not being able to predict</p> <p>Client leading</p> <p>Encountering problems</p> <p>Staying/persevering with IMRs.</p> <p>Experimenting</p> <p>Looking for a 'felt sense'</p> <p>Using it with child abuse</p> <p>Working with complex cases</p> <p>Using different perspective</p> <p>Getting comfort</p> <p>Client not being able to use</p>	<p>Once someone is 'IN' -the            caution people have            around working with            trauma</p> <p>The method seems very            experimental and trial and            error</p>







<p>367 well, which can generalise.</p> <p>368 Int- is it almost like a stepping stone, practising it first in your imagination and then in real life?</p> <p>370 P– yeah and then actually applying that more broadly.</p> <p>371 Int- Ok, how do you yourself experienced delivering IMRs? Compared to other</p> <p>372 techniques?</p> <p>373 P – um, I mean I enjoy it, I think it’s quite fun, I think as I say, sometimes I’ve had</p> <p>374 some really great successes with it other times not, so it’s not kind of like always</p> <p>375 working, um but generally I feel quite confident in it as a technique, I think you</p> <p>376 know, as we’ve spoken about it can be a little bit kind of like, flying by the seat of</p> <p>377 your pants kind of work because you just don’t know what’s going to happen, so</p> <p>378 you’re sort of, when you’re in it you’re quite focused and you’re really thinking</p> <p>379 like how is this going, do we need to adjust anything, and you’re kind of guiding a</p> <p>380 little bit because obviously there’s certain things you’re ideally hoping the client’s</p> <p>381 going to get out of it, and sometimes they need a little push at certain points, and</p> <p>382 other times you can kind of just take your hands off the wheel and they’re</p> <p>383 driving, um, so yeah, I mean I enjoy doing it,</p> <p>384 Int - and compared to other techniques?</p> <p>385 P – compared to other techniques, I think it’s....I mean because I’ve been doing</p> <p>386 this kind of work quite a long time, I don’t really find it difficult or um, nerve</p> <p>387 wracking anymore, but you know there are other techniques which are more</p> <p>388 straightforward like if you’re doing a timeline you go, du duh du du duh du you</p> <p>389 know, or you’re doing some psycho-ed you can just kind of reel it off, but</p>	<p>generalising skills</p> <p>generalising skills</p> <p>enjoying using ImRs</p> <p>Valuing its use and success</p> <p>not always working</p> <p>anxiety provoking nature</p> <p>going into the unknown</p> <p>being in the memory</p> <p>constantly evaluating</p> <p>offering guidance</p> <p>offering direction</p> <p>varying in client –led nature</p> <p>enjoying using ImRs</p> <p>comparing with other techs</p> <p>becoming easier</p> <p>used to be anxiety provoking</p> <p>ImRs being less straight forward</p> <p>ImRs being less scripted</p>	<p>imagery work</p> <p>Seems to be a sense of fun and creativity and enjoying the technique – maybe adding to its effectiveness?</p> <p>The level of uncertainly it can conjure up in therapists due to its unpredictable and client-led nature</p>
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<p>390 obviously IMRs is a bit more creative and it's a bit more unknown and um, you  391 know that's quite fun but I think, especially as I said I supervise a lot of therapists  392 on PTSD some of whom are relatively inexperienced, and certainly when they're  393 doing it to start with they find it quite nerve wracking you know, and they worry  394 that it might go wrong basically and that they might really upset somebody or that  395 they might re-traumatise them or unleash some stuff that they're not going  396 to be able to deal with, and I've done it enough times to know that whatever  397 comes up you can always deal with it, if you see what I mean, and but I think for  398 some people it's slightly anxiety providing as a technique just because it's a bit  399 creative and neither of you know when you start doing it, where exactly it's going  400 to take you.  401 - so compared to reliving you kind of know the history...  402 P – and there's a bit of the unknown in reliving because the first time you do  403 reliving you don't know how much emotion or whatever is in there, you can kind  404 of gauge it from having talked before and having kind of checked out association  405 and things like that in advance but you know as you say you know what the  406 memory is you don't usually go into reliving without at least having talked  407 through the trauma in some way first so you know what is going to happen and  408 you've agreed an end point and you've agreed strategies for going through it or  409 whatever, whereas yeah with imrs you don't know how long it's going to last, you  410 don't know how long it's going to take you, you don't really know if they're going  411 to connect with it, and run with it, or if they're going to be struggling with it so  412 yeah it's a bit more kind of um, yeah, I don't know what the word is really but um...</p>	<p>Being creative and unknown  Enjoying ImRs  Inexperienced Vs experienced  Worrying new therapists  Fearing it going wrong  Fearing going into the unknown  Coping with the unpredictable  ImRs always being manageable  ImRs being nerve-wracking  Valuing creative nature  Coping with the unpredictable    Unknown existing in reliving  Not knowing what emotion  Gauging emotion in reliving  Checking out in advance  Knowing in reliving  Talking through before  Knowing where reliving ends  Not knowing in ImRs  Feeling uneasy about unknown  Worrying about client  Working with the unknown</p>	<p>Concerns around going into  the unknown of someone's  imagination –what will  happen?  Therapists feeling the  responsibility of trying to  treat people not 're-  traumatise' people  Therapists maybe used to  more structure to fall back  on</p>
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<p>413 unknown.</p> <p>414 Int -and do you think there should be any changes made to IMRs to make it a more</p> <p>415 successful intervention?</p> <p>416 P- well I think there's room for development with it, because obviously we don't</p> <p>417 know a huge amount about it yet, and it might have the potential to be more</p> <p>418 powerful as we learn things, you know if we learn that a certain type of rescript is</p> <p>419 really effective for a lot of people. I think more being known about it especially</p> <p>420 for an experienced therapist will give them more confidence in it, people like to</p> <p>421 have a protocol almost and I think the fact that it is a little bit kind of you know</p> <p>422 variable and creative at the moment sometimes puts people off using it, because</p> <p>423 they're more likely to think I don't know what I'm doing kind of thing.</p>	<p>Needing ImRs to develop</p> <p>Facing gaps in knowledge</p> <p>Learning more - add to success</p> <p>Needing to know what works</p> <p>Needing to increase confidence</p> <p>Needing a protocol</p> <p>Unknown preventing its use</p> <p>Creative aspect of imagery causing lowered confidence</p>	<p>The need for therapists to fall back on a structured protocol – with a professional the need to rely on this structure maybe to ease professional responsibility?</p>
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## Appendix 15: Reference Table for codes and participant line numbers

	THEORETICAL CODES	SUB-CODES		Themes raised across participants (line number of quote)							
				1	2	3	4	5	6	7	8
1.	Using ImRs in PTSD	1.1	Understanding the concept of ImRs	174, 318,	9, 22, 42, 87, 95, 223, 228, 712	5, 209, 220, 387	50, 128, 276, 310, 572, 620	6, 204, 285, 458, 628, 704	5, 26, 51, 73, 155, 229, 243, 322	8, 185, 503, 531	6, 72, 81, 165, 289
		1.2	Deciding when to use ImRs	16, 132, 170	86, 106, 268, 411, 624	10, 44, 105, 126, 217, 247, 336, 372, 394	4, 83, 121, 188, 210, 568	10, 22, 63, 103, 110, 368, 488	7, 22, 32, 57, 112, 126, 140, 183	20, 26, 134, 207, 220, 417	77, 293, 301, 482
		1.3	Valuing ImRs techniques	11, 14, 365, 373	17, 635, 646	298, 309, 327,	454,	723	10, 190, 257, 279, 375, 391	5, 10, 252, 344, 366, 383, 411	7, 50, 268, 330, 459, 505
2.	Facing obstacles in working with the imagination	2.1	Therapists working with the unknown	30, 205, 307, 376, 390, 409, 417, 459	296, 331, 647, 667, 673	294	166, 412, 445, 551, 596	287, 299, 566, 586, 647, 656	79,99, 171, 257, 345, 360	254, 346, 353, 379, 387, 500	8, 20, 25, 43, 58, 272, 410, 412, 447
		2.2	Facing the client's uncertainty about doing IMRS	98, 111,	174, 424, 603, 616	114, 140, 194, 239	51, 218, 467	259, 590, 665	53, 306	325, 336, 471	179, 337, 417, 525
		2.3	Facing clients unable to use imagery	84, 102,	170, 187, 221	107, 208	60, 74, 251, 332	639	314, 318, 365	214, 285	421
3	Identifying the mechanisms of action	3.1	Restabilising power	155, 167, 236, 348, 256, 291, 347, 434	69, 80, 138, 156, 254, 309, 346, 552	29, 54, 79, 157, 186, 287	94, 144, 156, 179, 437, 464, 489	27, 42, 69, 83, 107, 190, 213, 258, 355, 448, 501, 525	144, 168, 186, 210, 273, 358, 395	87, 101, 110, 121, 253, 263, 283, 305, 314, 363, 370, 382, 395, 462	61, 67, 112, 138, 151, 164, 187, 204, 322, 362, 379, 459, 467
		3.2	Enabling an emotional shift to occur	20, 37, 47, 100, 147, 183, 194, 280, 313, 331,	110, 131, 251, 359, 381, 395, 426, 474, 512	69, 95, 173, 198, 307, 314	18, 42, 103, 258, 335, 343, 353, 429	223, 329, 337, 437, 571, 647, 723	9, 67, 120, 159, 198, 202, 232, 410, 418	12, 33, 53, 78, 93, 146, 156, 161, 169, 180, 198, 233, 294, 302, 412, 425, 456	18, 21, 26, 140, 215, 224, 243, 253, 269, 352, 392, 401, 429, 435

<b>4.</b>	<b>Moving from the unknown to the known</b>	<b>4.1</b>	Making sense of ImRs	53, 93, 182, 202, 231, 249	62, 91,112, 413, 503, 530, 549, 571	155, 202, 364	7, 223, 323, 339, 495	309, 325	44, 49, 86,	33, 222, 229, 427, 492	96, 150, 344
		<b>4.2</b>	Looking for structure	419, 463	668, 737	332, 341	587, 599, 626	698, 719	377, 386, 425	408, 499, 514	30, 411, 515
		<b>4.3</b>	Researching ImRs	443	684, 724, 792	203	135, 152, 372	710	412		15, 244

## Appendix 16: Examples of memo writing

### **Memo on not knowing where the imagination will go**

This was something that came up in the last few interviews. It seemed to be a very strong theme in working with the imagination, that ImRs is a powerful tool that cannot always be controlled. There seemed to be this concern about the imagination getting out of control. Maybe this is because it is something we cannot visibly see ourselves. With other techniques, such as thought records, these are always visible to the therapists. As some therapists said, there is no limit to the imagination and no end point so they did not know where ImRs could end up. This was definitely something that was very present in therapist's concerns when working with the imagination. Also, this sense of the therapist not being completely in control of this imagination, and how in ImRs they have to hand this control over to clients so they can decide what to do in their own minds. This is something that might be an added factor which makes the technique so powerful but at the same time is adding to the therapist's anxieties.

*CBT therapists like to have some sense of structure and kind of knowing where they're going and you can't predict that in ImRs (P8)*

*I think there's also a fear of the power of it in therapists as well, that it might get completely out of control and stuff (P6)*

*you don't know exactly where it's going to go or what they're going to come up with and you just have to feel your way through it a little bit which can be quite nerve-wracking (P7)*

Something adding to this anxiety of going into the unknown is definitely the limits to how much research exists in ImRs and how it is still a relatively new technique. This is may be on the therapist's mind when doing ImRs, affecting their confidence which could potentially be affecting the successful of the technique.

*I think more being known about it especially for an experienced therapist will give them more confidence in it, people like to have a protocol almost and I think the fact that it is a little bit kind of you know variable and creative at the moment sometimes puts people off using it, because they're more likely to think I don't know what I'm doing (P1)*

### **Memo on regaining power**

All therapists spoke about power in some way or another in the interviews, such as the power of PTSD symptoms, the power of the perpetrators or the traumatic act, the power of ImRs techniques, the power of the imagination and the power of revenge fantasies. This was a very interesting recurring theme as it sounded like power could be interconnected with other factors, such as this powerful strategy giving the power back to individuals who had lost of power from their PTSD. In regaining this power clients were having more positive thoughts about themselves and the control they can have in their life. It may be interesting to compare this technique with other techniques in PTSD, such as exposure. Exposure can be a very passive technique, with clients having to go over and over distressing memories which could even be causing the client

to feel very powerless. It must be a very powerful thing to give someone who has always felt powerless a psychological technique to get control of their symptoms but also it sounds like something which can lead clients to feel better about themselves and more powerful in their day to day lives. I'm also wondering how therapists feel witnessing clients taking control and power back themselves and what impact that has on them.

*so...you are handing over that power to the client (P8)*

*by him realising that he could manipulate the images himself, it took the power away from that picture, because it's only a picture, it's only a leftover thing from the past, it's not representative of danger now (P5)*

Power was an interesting theme as it seemed when the balance of power had been knocked in the trauma, it was important to try to restore a sense of control in order to survive and overcome the PTSD. Interestingly, the technique itself was also described as being very powerful and as such left some therapists slightly anxious in using the method (as discussed in the previous memo).

*I think there's also a fear of the power of it in therapists as well (P7)*





