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# Imagery rescripting as a stand-alone treatment for patients with social phobia: A case series



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#### ABSTRACT

*Background and objectives:* The majority of patients with social phobia reports experiencing negative images, usually linked to memories of earlier aversive social experiences. Several studies have indicated that such negative self-imagery appears to have a causal role in maintaining social phobia, which suggests that interventions aimed at dealing with these images could be beneficial in the treatment of social phobia. One potentially powerful approach is imagery rescripting (IR), a clinical intervention that focuses on changing the meaning and impact of unpleasant memories. In the treatment of social phobia IR was only used as part of a broader cognitive-behavioral treatment package. However, we propose that IR alone might also be an effective treatment for this anxiety disorder. The present study reports an initial evaluation of the application of IR as a stand-alone treatment for six adult outpatients presenting with social phobia.

*Methods:* A single case series using an A-B replication across patients design was employed. Following a no-treatment baseline period, IR was delivered weekly and patients were followed up for 3 and 6 months.

*Results:* For all patients, substantial reductions were obtained on all outcome measures at post-treatment, and gains were largely maintained at 6-months follow-up.

*Limitations:* The generalizability of the effects of IR for social phobia is limited by the small number of patients treated by only one therapist.

*Conclusions:* The results of this preliminary case series suggest that IR as a stand alone treatment is an apparently effective intervention in the treatment of patients with social phobia, and indicate that controlled evaluation of its efficacy might be worthwhile.

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#### 1. Introduction

The majority of patients with social phobia reports experiencing negative, observer-perspective images, which elicit anxiety as they represent what patients fear (Hackmann, Surawy, & Clark, 1998). These negative images are usually based on memories of earlier aversive social experiences, that cluster around the onset of the disorder (Hackmann, Clark, & McManus, 2000). The way patients appear in the intrusive negative self-images remains stable and constant across many different social situations, despite subsequent more positive experiences (Clark, 2005; Hackmann et al., 2000).

Several studies have indicated that negative self-imagery appears to have a causal role in maintaining social phobia by increasing state anxiety, enhancing unrealistically negative selfjudgments, and having a detrimental effect on performance and the social situation in general (Hirsch, Clark, Mathews, & Williams, 2003; Hirsch & Holmes, 2007). Given the detrimental impact on patients with social phobia, interventions aimed at successfully dealing with negative images should have a useful therapeutic effect. One potentially powerful approach is imagery rescripting (IR), in which memories of traumatic social situations, which form the basis of negative self-images, are restructured by imagining that the course of events is changed in a more desired direction (Arntz, 2012; Wild & Clark, 2011; Wild, Hackmann, & Clark, 2007, 2008). IR involves having patients revisiting their memory in three stages. First, patients are asked to relive a past traumatic social experience from the age at which it occurred (reliving stage). In the second

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stage, patients first relive the event again, but this time from the perspective of their current age observing what is happening to their younger self, and are then invited to intervene in the situation, e.g. by imagining themselves entering the situation as an adult helping their younger self (mastery stage). In the third and final stage, the patient relives the rescripted scene from the perspective of their younger self (compassionate stage).

IR was originally developed for adult survivors of childhood trauma (Arntz & Weertman, 1999; Smucker, Dancu, Foa, & Niederee, 1995). To date, IR is integrated in several well-established CBT packages for PTSD, social phobia, nightmares, personality disorders (see Arntz, 2012), and is also used as a stand-alone treatment in cases of PTSD and depression (e.g. Brewin et al., 2009; Grunert, Smucker, Weis, & Rusch, 2003). So far, a limited number of studies has provided support for the efficacy of one session of IR as part of, or preceding a broader cognitive behavioral treatment package for social phobia (Wild et al., 2007, 2008). More recently, IR was found to be efficacious as a stand-alone treatment (i.e., without explicit logical or verbal restructuring; Nilsson, Lundh, & Viborg, 2012), with effect sizes matching those of IR with cognitive restructuring as found by Wild et al. (2008). Although not having directly tested the relative effectiveness of IR with, or without cognitive restructuring, results of this study strongly question the need of cognitive restructuring. The present study reports an evaluation of the application of IR as a stand-alone treatment for six patients presenting with social phobia, using a single-case design. We predicted that IR would result in a significant reduction of symptoms of social phobia.

#### 2. Method

#### 2.1. Design

A single case series using an A-B replication across patients design with follow-up was employed (Barlow & Hersen, 1984). For this design, patients were assigned to a no-treatment baseline period of three weeks, so that individual baselines could act as control periods. Patients met the therapist at both the beginning and the end of the baseline period to complete relevant outcome measures. Furthermore, halfway through the baseline period data were collected during a telephone interview by the therapist. No treatment or discussion of the content of patients' fears was permitted during the baseline period. Following the baseline period, IR was delivered weekly, with each session lasting up to 45 min. As we were interested in the effectiveness of IR in clinical practice, we decided that treatment was allowed to continue until both the therapist and patient were satisfied about the results of the intervention, instead of stipulating a fixed number of sessions. As a result, the number of sessions ranged from 5 to 17, with a mean number of 11.2. None of the patients terminated the treatment prematurely. On completion of treatment, patients were followed up for 3 and 6 months, during which period no further treatment was provided.

#### 2.2. Patients

Six patients were drawn from consecutive referrals for anxiety disorder treatment to PsyQ, an outpatient community mental health center in the Netherlands, made by general practitioners. Patients were assessed by the therapist (the first author: PF) using the Dutch version of the Structured Clinical Interview for DSM-IV axis I (SCID-I; First, Spitzer, Gibbon, & Williams, 2001). Patients were included if they met the following criteria: (1) primary diagnosis of social phobia, (2) age 18–65, (3) not in receipt of concurrent psychological treatment, (4) not meeting DSM-IV-TR

criteria for severe major depressive disorder that required immediate treatment, psychotic disorder, bipolar disorder, or PTSD (5) no evidence for mental impairment or organic brain disorder, (6) no substance abuse requiring specialist treatment, and (7) medication free or stable on medication (i.e., at least two months without a change in medication dose or type).

Patients' age ranged from 21 to 47 years, and the duration of the social phobia problems ranged from 1 to 28 years. None of the patients met criteria for concurrent Axis I disorders, and none of them had received previous cognitive-behavioral treatment for social phobia. Five patients were free of medication, one patient (patient 1) was stable on medication (SSRI) all through baseline, treatment, and follow-up. Two patients had at least a vocational training and four had a bachelor or university degree. Demographic characteristics for each patient are presented in Table 1. Moreover, brief background details are provided below.

Patient 1 was a 40 year old man with a 1-year history of social phobia. His main problem involved fear of blushing when talking to other people. As a consequence of his social anxiety he was on a sick leave from his full-time job as a manager. During treatment he continued to take 20 mg Fluoxetine daily. Rescripted memories concerned humiliating experiences at work during his early adult life.

Patient 2, a 21 year old woman, was diagnosed with social phobia when she was 19 years old. She was preoccupied with the fear of being criticized at work. Other persistent fears centered on talking to strangers and being rejected when expressing her opinion. During treatment she was on sick leave, as a consequence of the social phobia. She was employed as a full-time secretary. Memories of traumatic social situations included being laughed at by her classmates, not being supported by her teacher, and being emotionally deprived by her parents. These negative experiences took place when she was between 7 and 12 years of age.

Patient 3 was a 28 year old woman who presented with social phobia of 10-year duration. Her main concern was to act in a humiliating or embarrassing way. She was a full-time student, but was unable to undertake her traineeship as a result of her fear of being observed by her supervisor. This fear originated in negative experiences centered around the theme of feeling neglected by her peers in her childhood (between 7 and 12 years of age), such as being ignored by her classmates when giving a speech at school when she was 8 years old.

Patient 4, a 47 years old man, who was diagnosed with social phobia at the age of 19. He had a history of depressive episodes, for which he had previously received client-centered therapy in an outpatient treatment centre. He was particularly afraid to be humiliated when entering a room, in which acquaintances were present, especially women he liked. During the treatment he was unemployed. Previously he was a full-time counselor of mentally retarded adults. His memories of adverse social events went back to his adolescense (between 15 and 21 years of age), and concerned experiences of being bullied or humiliated when he was dating girls.

Patient 5 was a 31 year old man with a 15-year history of social phobia. His main problem was his fear of blushing, as a result of which he experienced high levels of anxiety when he had to give a demonstration in his full-time job as a salesman. Furthermore, he avoided dating because of his fear of blushing, as a result of which he had never had an intimate relationship. Rescripted memories of negative social events concerned experiences of not being emotionally supported by his parents in his childhood (between 5 and 8 years of age), and adverse social experiences with his peers when he was between 13 and 18 years of age.

Patient 6, a 30 year old woman, was diagnosed with social phobia when she was 22 years old. She did not report having any

Table 1

Demographic characteristics	for each patient.

Patient	Age in years	Sex	Civil status	Duration of social phobia	Use of psychopharmaca	Educational level	Employment
1	40	Male	Married	1 year	SSRI	Bachelor	Sick leave
2	21	Female	Single	2 years	_	Bachelor	Sick leave
3	28	Female	Married	10 years	_	Vocational training	Student
4	47	Male	Single	28 years	_	Vocational training	Unemployed
5	31	Male	Single	15 years	_	Bachelor	Full-time
6	30	Female	Single	18 years	-	University	Full-time

panic attacks. She mainly feared not knowing what to say when meeting acquaintances and in work meetings. She worked full-time as a lawyer. Memories of adverse social experiences involved not meeting the high intellectual family standards (between 10 and 12 years of age), being laughed at and feeling humiliated by her classmates when giving a speech (between 14 and 16 years of age), and failing to meet presumed high standards (in her early twenties).

#### 2.3. Measures

Treatment outcome was evaluated by means of the Dutch versions of standardized and widely used self-report measures assessing different dimensions of social phobia.

#### 2.3.1. Social interaction anxiety scale (SIAS; Mattick & Clarke, 1989)

The SIAS is a 19-item self-report questionnaire that measures interaction anxiety. Total scores on the SIAS range from 0 to 76. The Dutch translation of the SIAS has sound psychometric properties ( $\alpha = .95$ ) (Voncken & Dijk, 2013).

#### 2.3.2. Social phobia scale (SPS; Mattick & Clarke, 1989)

The SPS was employed as an index of performance anxiety. Total scores of this 20-item self-report questionnaire range from 0 to 80. The SPS has been shown to possess good psychometric qualities ( $\alpha = .89$ ) and is sensitive to change after treatment (Cox, Ross, Swinson, & Direnfeld, 1998).

#### 2.3.3. Anxiety and avoidance scale (AVS; Watson & Marks, 1971)

The AVS was used to measure disorder-specific anxiety and avoidance. Five diverse and frequently occurring idiosyncratic situations leading to high levels of anxiety and/or avoidance were identified. For each situation, the degrees of anxiety and avoidance are rated on a visual analogue scale, ranging from 0 to 8 (with 8 indicating the highest level of anxiety/avoidance).

## 2.3.4. Social phobia subscale of the Dutch social phobia anxiety inventory (SPAI-N; Bögels & Reith, 1999)

This subscale of the SPAI-N contains 32 items related to somatic symptoms, cognitions, anxiety, and escape or avoidance behaviors associated with social phobia, with total scores ranging from 0 to 192. This specific subscale of the Dutch translation has demonstrated good psychometric properties ( $\alpha = .99$ ) (Bögels & Reith, 1999).

#### 2.3.5. Brief fear of negative evaluation scale (BFNE; Leary, 1983)

This 12-item questionnaire measures the fear of being negatively evaluated by others. Total scores of the BFNE range from 12 to 60. The psychometric qualities are good ( $\alpha = .80$ ) (Duke, Krishnan, Faith, & Storch, 2006).

### 2.3.6. Beck Anxiety inventory (BAI; Beck, Epstein, Brown, & Steer, 1988)

The current level of physiological and cognitive symptoms of anxiety was assessed with this 21-item measure with total scores ranging from 0 to 63. The BAI has shown good psychometric qualities ( $\alpha = .92$ ) (Beck et al., 1988).

#### 2.4. Procedure

Patients completed the SIAS, SPS, and AVS at all baseline assessment points, prior to every treatment session, and at 3 and 6 month follow-up assessments. The three other self-report questionnaires were completed at entry (prebaseline), after the last treatment session (post-treatment), and at 6-month follow-up assessment.

#### 2.5. Imagery rescripting

The treatment manual was based on the previous work of Smucker et al. (1995), Wild et al. (2007, 2008), Wheatley et al. (2007), and Arntz and Weertman (1999). In the first session, a treatment rationale as described by Wheatley et al. (2007) was provided, in which a metaphor of intrusive memories being like ghosts from the past was used. After providing this rationale, IR proceeds with revisiting specific memories of earlier experiences associated with present problems in three stages; reliving, mastery, and compassion. The first stage, reliving, starts with identifying a specific memory. This is done by asking patients to close their eyes and relive a problematic recent social event in as much detail and as vividly as possible. Next, they are asked when they first remembered feeling the way they do in this image, and then to imagine the earlier experience associated with that feeling. Patients are encouraged to relive this experience as if it were happening now. In the second (mastery) stage of the procedure, patients are invited to relive the memory at their current age, watching what happened to their younger self, and are then asked what the younger self needs to happen in the memory to change the feelings of the younger self in a positive direction, for example by asking "What would need to happen in the image for the younger self to feel better?" or "Is there anything you as the adult would like to do?" (Wheatley et al., 2007).

Next, patients are guided to introduce corresponding modifications to the distressing image, e.g. by intervening in the situation or by offering compassion to the younger self. The purpose of this stage is to replace victimization imagery with coping imagery (Wheatley et al., 2007), by imagining (1) themselves responding differently or appraising the situation differently in the memory, (2)themselves entering the memory as their adult self and help their younger self, and/or (3) another person entering the memory, responding as patients would have liked to have happened during the original event (Hirsch & Clark, 2004). In the third and final stage, the compassionate stage, patients relive the rescripted scene, but this time from the perspective of their younger self. This often elicits further needs from the younger self that were not met by the earlier intervention, such as extra nurturing or help to feel safe in some way. Patients are stimulated to express any need until they feel relieved. This phase, in which the adult is compassionate with affection and soothing words, may enhance the patient's feeling of being accepted, a key concept in social phobia (Wild et al., 2008).



Fig. 1. Scores on the Social interaction anxiety scale (SIAS) and Social phobia scale (SPS) for the 6 patients during baseline, treatment and follow-up.

Each treatment session encompassed the rescripting of one specific memory. If the entire event had not been rescripted in one session, the IR procedure was completed in the next session. At no stage did the therapist verbally challenge negative thoughts or suggest any exposure exercises or behavioral experiments.

All treatments were delivered by the first author (PF), a staff psychologist of the participating mental health care center with







Fig. 2. Scores on the Anxiety and avoidance scale (AVS) for the 6 patients during baseline, treatment and follow-up.



additional post-qualification training in cognitive-behavioral therapy. She did not have specific prior experience with rescripting memories.

#### 3. Results

Each patient's scores on the SIAS, SPS and the AVS during the baseline and treatment periods, and at follow-up are shown in Figs. 1 and 2. The baseline scores were not stable for each patient across all

three outcome measures. Patient 6 showed a decrease on the SIAS, whereas patient 2 and 5 showed an increase on this measure. Patient 5 also showed an increase on the SPS. Furthermore, on the AVS patient 4 and 6 showed a decrease in avoidance in the baseline period, whereas patient 4 also showed an increase in anxiety. Each patient showed substantial reductions in interaction anxiety, performance anxiety, and degrees of anxiety and avoidance related to their five idiosyncratic situations over the course of treatment. These gains were largely maintained at the follow-up assessment points.



Data for each patient on SPAI-N, BFNE and BAI at pre- and posttreatment, and follow-up assessments are shown in Fig. 3. For each patient, post-treatment scores were lower than pre-treatment scores on all measures. Percentage improvement from pre- to post-treatment on the SPAI-N for patient 1 was 46%, patient 2, 85%, patient 3, 53%, patient 4, 35%, patient 5, 60%, and patient 6, 12%. On the BFNE, the percentage improvements were as follows: patient 1. 65%, patient 2, 48%, patient 3, 22%, patient 4, 25%, patient 5, 17%, and patient 6, 45%. On the BAI, the percentage improvements were as follows: patient 1, 58%, patient 2, 43%, patient 3, 25%, patient 4, 33%, patient 5, 30%, and patient 6, 50%. However, results were less clearcut at the follow-up assessment. On the SPAI-N and BFNE, only three patients continued to improve their scores during follow-up. With the exception of patient 6, whose follow-up score on the SPAI-N was higher than the pre-treatment score on this measure, the other scores at follow-up represented a slight deterioration, but they continued to represent a substantial reduction from pretreatment assessment. As such, in terms of percentage improvement almost all patients improved from pretreatment to follow-up on the SPAI-N, patient 6 deteriorated (17%), but the other five patients improved: patient 1, 56%, patient 2, 54%, patient 3, 58%, patient 4, 67% and patient 5, 60%. On the BFNE all patients improved from pretreatment to follow-up: patient 1, 22%, patient 2, 43%, patient 3, 52%, patient 4, 44.%, patient 5, 31%, and patient 6, 59%. On the BAI, only one patient (4) experienced a further decrease. Two patients (1 and 2) experienced an increase, but their follow-up score still represented a substantial improvement as compared to pretreatment assessment. However, the follow-up scores of patient 3 and 6 increased to the level of their pretreatment scores. This was reflected in the percentage improvement from pretreatment to 6 months follow-up on the BAI: patient 1, 33%, patient 2, 36%, patient 3, 0%, patient 4, 72%, patient 5, 10%, and patient 6, 0%.

#### 4. Discussion

The main goal of this study was to answer the question whether IR could be an effective treatment for social phobia. The results of this preliminary case series suggest that IR as a stand alone treatment is an apparently effective intervention in the treatment of patients with social phobia. For all patients, substantial reductions were obtained on most outcome measures at post-treatment, and gains were largely maintained at 6-month follow-up. As the baseline scores on most outcome measures were predominantly stable across patients, or were fluctuating without a strong trend towards an increase or decrease, it is unlikely that the observed IR effects are the result of spontaneous recovery.

Remarkably, the number of sessions of IR before treatment could be terminated significantly differed across patients. Unfortunately, neither the available demographic and clinical characteristics, such as pretreatment scores, duration of social phobia, nor age of onset provided a clear-cut answer to the question why some patients required less than 10 sessions before treatment could be ended, whereas for others treatment extended to 14 sessions or more. Moreover, qualitative data such as the nature of the rescripted memories and the age at which the adverse experiences took place, were not informative either.

The question further remains how IR exerts its effect in the treatment of social phobia. The rationale for IR is based on changing appraisals, with the goal to reduce the distress associated with negative memories that influence patients' experience of the present, by seeing the traumatic event(s) as an isolated (series of)



5

4

Patients

30

20

10

0

23

18

2

3

(BAI) at the beginning of the baseline period, at post-treatment and 6 months followup for each patient.

event(s) in the past, rather than as the basis for a rule about oneself, others and/or the world. This might be achieved by the repeated evocation of the traumatic memory, updating the meaning of the memory by inserting new information closely related to the key cognitions into it, and/or introducing a compassionate perspective (Wheatley & Hackmann, 2011; Wild et al., 2008). However, Brewin's retrieval competition theory (Brewin, 2006) provides an alternative theoretical framework for IR. This account states that beliefs about the self are underpinned by memories of specific autobiographical events. In any given situation, competition for retrieval exists between multiple memory representations. In psychological disorders, there is a bias towards retrieval of more negatively valued responses. Brewin (2006) proposed that psychological therapies do not directly modify negative representations, but create alternative, less toxic representations in memory that then compete for retrieval with the original, negative ones. From this view, the new representations do not have to be more accurate, they only have to be more accessible when patients are confronted with the same retrieval cues (Brewin et al., 2009). It can be argued that IR helps patients to create new, more positive representations of negative memories from past events, and assists the retrieval of this alternative by retrieval practice, by its memorability, and by a general positivity bias (Wheatley et al., 2007), resulting in a bias towards retrieval of these newly constructed representations. A third and final explanation we want to discuss here has been provided by Arntz et al. (Arntz, 2012; Arntz & Weertman, 1999), who suggested that one of the mechanisms underlying IR might be a change of the emotional memory representation of the original aversive event (or: revaluation of the unconditioned stimulus [US]). Results of a recently conducted test of this hypothesis showed that adding IR to extinction led to devaluation of the valence of the US and to less return of fear than mere extinction, suggesting that IR indeed acts through US revaluation (Dibbets, Poort, & Arntz, 2012).

Another remaining question is whether this approach is suitable for all patients with social phobia. It might as well be that IR is especially indicated for patients who report intrusive memories, suggesting that negative information has been encoded and is retrieved in a sensory way (Wheatley et al., 2007). Furthermore, for IR to work, patients have to be willing to disclose and explore the distressing memories. It could be argued that patients with social phobia, who often are high in avoidant coping, choose not to discuss these most distressing moments of their lives. It has therefore been suggested that an initial period of CBT might be needed prior to IR (Brewin et al., 2009; Wheatley et al., 2007). However, this may also indicate that IR should not be used as a stand-alone treatment, but should be included as a routine intervention in cognitive therapy for social phobia. Future studies will need to address this issue.

The study is not without limitations. First, the generalizability of the effects ofIR for social phobia is limited by the small number of patients treated by only one therapist, who also assessed the patients. However, the sample seems to be representative for patients seen by practicing clinicians as they were clinically referred to a routine outpatient treatment centre, and exclusion criteria were kept to a minimum. Nevertheless, to reach conclusions concerning both the potency and the unique or incremental benefits of IR, future studies should include larger number of patients and therapists, and should preferably aim to evaluate the effectiveness of IR against evidence-based approaches for social phobia. Such studies would also benefit from using independent assessors to establish the diagnosis and to collect data. of the questionnaires are only available of the SPAI and the SIAS. A second limitation is the reliance on self-report measures that were completed by only one informant (i.e., the participants), as a result of which an independent clinician-administered assessment of treatment outcome is lacking. Furthermore, we did not include a measure for assessing behavior change. Although change on self-report measures of social phobia has been found to be correlated with change on behavior tests (Clark et al., 2006), the inclusion of behavioral measures of social phobia (e.g. talking to unknown people) in future studies is desirable. This also applies to a measure of depression, as there is good reason to expect that even milder forms of depression might interact with social anxiety. A final limitation is that it cannot be ruled out that the observed effects may be attributable to other factors than the IR-intervention, as single case research does not allow for examination of non-specific treatment effects to outcome.

Despite these limitations, results of this first study on the therapeutic impact of rescripting unpleasant memories as a standalone intervention for patients with social phobia are apparently effective and encouraging, and warrant further investigation in a controlled trial.

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