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# ONE-SESSION GROUP THERAPY OF SPIDER PHOBIA: DIRECT VERSUS INDIRECT TREATMENTS

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**Summary**—Forty-six patients with spider phobia, fulfilling the DSM-IV criteria for specific phobia, were assessed with behavioral, physiological and self-report measures. They were randomly assigned to three group treatment conditions: (1) direct treatment; (2) direct observation; and (3) indirect observation. All treatments were carried out in large groups of eight patients, and consisted of one 3 hr session of massed exposure and modelling. The results showed that on the behavioral test, measures and the specific self-report measures of spider phobia the direct treatment was significantly better than direct observation and indirect observation, which did not differ. On the physiological measures and the psychopathology self-report measures there were significant pre-post improvements, but no differences between the groups. The effects were maintained or furthered at the one year follow-up assessment. The proportion of clinically significantly improved patients were, at post-treatment, 75% in the direct treatment, 7% in the direct observation, and 31% in the indirect observation group. At follow-up, the corresponding figures were 75, 14, and 44%, respectively. The conclusion that can be drawn is that direct treatment is the treatment of choice. © 1997 Elsevier Science Ltd

## INTRODUCTION

Specific phobias are the most common of the anxiety disorders with an estimated lifetime prevalence of 10–11% in the American population (DSM-IV; APA, 1994). Among the specific phobias it seems that spider phobia is the most common in the population (Bourdon *et al.*, 1988). The therapy proven to be most successful for phobias is exposure (e.g. Chambless, 1990; Marks, 1987). Most exposure treatments have been therapist-directed where the therapist usually has weekly sessions with the patient until the problem is remedied. Recent research has shown that short intensive treatment during a single session produces just as good results as more spaced programs do and could be considered the treatment of choice for specific phobias (Hellström & Öst, 1995; Hellström, Fellenius & Öst, 1996; Öst, 1989a, 1996; Öst, Hellström & Kåver, 1992; Öst, Salkovskis & Hellström, 1991). This treatment has also been replicated in spider phobia (Arntz & Lavy, 1993), and there is even earlier research showing that brief treatment of animal phobias is effective (e.g. Bandura, Blanchard & Ritter, 1969).

One possibility to increase cost-effectiveness is to treat patients in groups. The literature contains a number of studies on specific phobias in which group treatments have been used. In acrophobia Ritter (1969a) used a small group of three patients and found that group contact desensitization was significantly better than non-contact desensitization and a control condition. Pendleton and Higgins (1983) also used groups of three or four patients and reported that negative practice and systematic desensitization were equally effective. In flying phobia Howard, Murphy and Clarke (1983) treated subjects in groups of two to three during 8 weekly 1 hr sessions and found that all active treatment conditions, i.e. systematic desensitization, flooding, implosion, and relaxation were more effective than no treatment but there was no difference between them. The specific phobia having the most group treatments is dental phobia. Wroblewski, Jacob and Rehm (1977) gave groups of two to five patients seven sessions during a 10-day period and found that symbolic modelling plus relaxation was more effective than symbolic modelling only or attention placebo when it comes to obtaining dental treatment after

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therapy. Gatchel (1980) compared a group of eight patients treated with self-control desensitization with a group of five patients treated with education and discussion, and found the former to be significantly better than the latter and a control. Gauthier, Savard, Hallé and Dufour (1985) compared flooding and coping skills training, in a cross-over design, and administered the treatments in groups of three to four patients. They found no difference between the conditions. Jerremalm, Jansson and Öst (1986) treated dental phobics in groups of four during nine 90 min sessions, finding that applied relaxation and self-instructional training did equally well. Ning and Liddell (1991) compared massed (2 sessions per week for 2 weeks) with spaced (4 weekly sessions) anxiety management training, and found them to be equally effective. Nine patients were randomized to each condition but there is no information on the group size.

In a previous study on spider phobia from our laboratory (Öst, 1996) it was found that a large group of seven or eight patients yielded almost as good results as a small group of three or four patients. Despite a trend in favor of the small group on most measures this was only significant on the self-rating of anxiety during the behavioral test. In terms of clinically significant improvement the small group yielded 82% at post-treatment and 95% at follow-up, while the corresponding figures for the large group were 70 and 75%, respectively.

The conclusion that can be drawn from this brief review is that group treatment, mostly in small groups of three or four patients, has been used for dental phobia and to some extent for acrophobia, flying phobia, and spider phobia. However, the group format has not been tested for patients with blood–injury–injection phobia, or claustrophobia, which are very common in the general population.

One important component of the one-session treatment for animal phobias is the participant modelling that is fully integrated with exposure. Other forms of modelling have been investigated in previous research, primarily live modelling and symbolic modelling (see review by Rosenthal & Bandura, 1978). In live modelling the patient observes a model interacting with the animal in question, but does not actively interact herself/himself. In symbolic modelling the patient is shown a film or videotape of a model. These two types of modelling may utilize a patient as a model, but that is not a requirement, and any suitable person can act as a model.

Bandura *et al.* (1969) found that participant modelling (PM) was significantly better than symbolic modelling (SM) for snake phobics. In a second study on snake phobia (Bandura, Adams & Beyer, 1977) PM was significantly better than live modelling, and the same result was reported in a study of acrophobia by Ritter (1969b). In dental phobia, Shaw and Thoresen (1974) found that SM was equal to systematic desensitization and better than both placebo and waitlist control. Finally, Bernstein and Kleinknecht (1982) found equal effects of PM, SM and exposure in vivo for dental phobia. The conclusion that can be drawn from these studies is that for animal and acrophobia, PM is more effective than live modelling and symbolic modelling, but for dental phobia SM did as well as the comparison treatments.

The primary aim of the present study was to investigate the effects of two forms of modelling (live and symbolic) in comparison to the standard one-session treatment containing prolonged exposure and participant modelling, in group treatment of spider phobia. Live modelling in this study means that one patient is being treated while eight patients are watching the treatment from a distance of 3–5 feet. This treatment is called direct observation. Symbolic modelling, which in this study, is called indirect observation, means that the group of eight patients is watching the videotape of the patient being treated in the direct observation condition. In this way, the personal characteristics, anxiety reactions, etc. of the model, as well as the therapeutic assistance of the therapist are kept constant across the latter two conditions. Based on the studies by Bandura *et al.* (1969, 1977) cited above it was predicted that the direct treatment would be more effective than both indirect treatments, and that the direct observation (live modelling) would be more effective than indirect observation (symbolic modelling). This prediction holds for the behavioral test measures and the self-report measures of spider phobia, but not for the general questionnaire measures where only significant improvements across the groups were expected. It was also predicted that the effects would be maintained, or that further improvement would have taken place, at the 1 yr follow-up, which is the case in our previous one-session studies (Hellström & Öst, 1995; Hellström *et al.*, 1996; Öst, 1996; Öst *et al.*, 1991, 1992).