Monitoring Coping Style and Exposure Outcome in Spider Phobics

Peter Muris
University of Amsterdam, The Netherlands

Peter de Jong and Harald Merckelbach
University of Limburg, The Netherlands

Florence van Zuuren
University of Amsterdam, The Netherlands

The present study investigated whether information seeking coping styles (monitoring and blunting) affect exposure therapy outcome. Subjects were 33 spider phobics who received one 2.5 hours session in vivo treatment. In general, the treatment yielded good results. Coping style did not contribute substantially to short-term or long-term outcome (at 18 months follow-up).

Introduction

In clinical practice, simple phobias are mostly treated by exposure in vivo therapy. Öst (1989) showed that even one 2.5 hours session can yield good results: an improvement rate of 90% is not unusual. Despite this high success rate, behavioural oriented clinicians and researchers have been trying to optimize exposure in vivo therapy. Variables as gradualness of exposure (Emmelkamp, 1974), the presence of a model (Emmelkamp and Emmelkamp-Benner, 1975), imagery ability (Merckelbach, de Jong and Arntz, 1991), and elaboration of the phobic stimulus (Arntz and Lavy, 1993) have been investigated but do not seem to affect treatment outcome.

A recent study of Steketee, Bransfield, Miller and Foa (1989) suggested that the subject's coping style might be an important moderating factor in determining exposure treatment outcome. In this study, twenty-seven animal phobics were divided into "monitors", i.e. those who predominantly seek knowledge about a stressor, and "blunters", i.e. those who usually try to avoid threat-relevant information. Evidence was found to suggest that

Reprint requests to Peter Muris, Department of Clinical Psychology, University of Amsterdam, Roeterstraat 15, 1018 WB Amsterdam, The Netherlands.

© 1993 British Association for Behavioural and Cognitive Psychotherapies
monitors improved more than bluters. This finding was explained in terms of the tendency of monitors to be more attentive to threat-relevant cues during exposure treatment, thereby processing more fully corrective information (i.e. the absence of actual danger; see Foa and Kozak, 1986).

With respect to the maintenance of treatment results, Öst (1989; p. 4) remarks: "The basic principle that the patient must follow in order for the treatment results to be maintained in the long run is in the future never to escape or avoid confrontation with the former phobic object." Following exposure treatment, patients are usually instructed to keep on exercising at home. Under this condition, it is conceivable that patients with a monitoring coping style will attend more to the (former) phobic stimulus than patients with a blunting coping style, the latter tending to avoid phobia-relevant information. Thus, it can be argued that in the long run, therapy success will be better consolidated in monitors than in bluters.

In an attempt to replicate and extend the previous findings of Steketee et al. (1989), the present study examined the relationship between monitoring/blunting, and short-term and long-term treatment outcome in spider phobia.

**Method**

**Subjects**

Subjects were 40 female spider phobics who applied for treatment at the Spider Phobia Project of the Limburg University. All subjects met DSM-III-R criteria for simple phobia. The treatment consisted of a 2.5 hours *in vivo* exposure session as described by Öst (1989).

**Assessment and procedure**

Before and immediately after treatment, subjects completed the Spider Phobia Questionnaire (SPQ; Klorman, Weerts, Hastings, Melamed and Lang, 1974) and carried out a Behavioural Approach Test (BAT).

The SPQ is a widely used and validated 31-item self-report instrument that measures fear of spiders (Frederikson, 1983). SPQ scores range from 0–31. The BAT was used to assess actual avoidance of spiders. During this test, subjects were asked to pull a glass jar with a live spider as near as they could tolerate. The BAT was scored on a 13-point scale, ranging from 0 (spider at 3 m. distance) to 12 (spider on the hand). Eighteen months after treatment, subjects completed a follow-up measurement of the SPQ.

After 18 months, subjects also completed a five-point version of the Miller Behavioural Style Scale (MBSS; Miller, 1987. Dutch translation by F.J. van Zuuren; see van Zuuren & Wolfs, 1991). The MBSS measures styles of information seeking under threat. The test consists of four hypothetical
threatening situations (dentist, aeroplane, dismissal and hostage). Each situation is followed by four monitoring (information seeking) and four blunting (information avoiding) items. The subject has to indicate to what extent each item is applicable to him/her (1 = not at all applicable; 5 = very much applicable). A total monitoring and total blunting score can be derived by summing the scores on the relevant items (range for each subscale: 16–80). Miller (1987) has reported that both monitoring and blunting scores have good test-retest reliability ($r_s$ of approximately .75). In the present study, mean monitoring and blunting scores were 55.3 ($SD = 7.5$) and 43.1 ($SD = 6.8$), respectively. Only the analyses with monitoring scores will be presented in the present article, since analyses with the blunting scores essentially revealed the same results.

Thirty-three out of 40 subjects (85%) cooperated by returning the MBSS. They had a mean age of 31.7 years ($SD = 10.2$; range 17–53). $T$-tests revealed that the seven non-responders did not differ on any measure as compared to the 33 responders (all $t$s < 1). Backward regression analyses were carried out (1) in order to explore the relationship between monitoring on the one hand and post-treatment SPQ and post-treatment BAT on the other hand (short-term outcome); (2) in order to examine the contribution of monitoring to SPQ scores at 18 months follow-up (long-term outcome). In all regression analyses, pre-treatment scores of the outcome measure were included to control for initial differences. In addition, Pearson product-moment correlations were computed of monitoring with short-term therapy success (as indexed by $SPQ_{post} - SPQ_{pre}$ and by $BAT_{post} - BAT_{pre}$), long-term therapy success (as indexed by $SPQ_{follow-up} - SPQ_{pre}$) and relapse (as indexed by $SPQ_{follow-up} - SPQ_{post}$).

**Results and discussion**

The means of the phobic sample ($N = 33$) on SPQ pre-treatment, SPQ post-treatment and SPQ follow-up were 23.5 ($SD = 3.0$), 11.9 ($SD = 5.3$), and 13.8 ($SD = 6.1$), respectively. Immediate and long-term therapy outcome were highly successful, as indicated by separate $t$-tests [$t(32) = 13.7, p < .001$; $t(32) = 9.0, p < .001$, respectively]. The increase on the BAT, from 3.1 ($SD = 1.8$) at pre-treatment to 9.3 ($SD = 2.8$) immediately after therapy, confirmed short-term therapy success [$t(32) = -12.8, p < .001$].

Regression analysis with post-treatment SPQ being the dependent variable and monitoring and pre-treatment SPQ being predictor variables, showed that coping style had no influence on short-term therapy outcome [$beta = .06; t(2,30) = .37$]. A similar analysis with BAT scores as the depen-

* Data concerning the blunting scores can be obtained from the first author.
dent measure, supported this finding \[\beta = -.02; t(2,30) = -.12\]. A final regression analysis with follow-up SPQ being the dependent variable and monitoring and pre-treatment SPQ being predictors, demonstrated that there was no effect of coping style on long-term therapy outcome \[\beta = -.02; t(2,30) = -.09\].

In line with this, Pearson \(p-m\) correlations between monitoring on the one hand and success and relapse scores on the other hand were extremely low: monitoring scores correlated .05 (SPQ) and .01 (BAT) with short-term success, -.04 with long-term success, and -.09 with relapse. Pearson \(p-m\) correlations are presented in Table 1. Note that all correlations between monitoring and the outcome measures were weak and non-significant.

<table>
<thead>
<tr>
<th></th>
<th>Monitoring</th>
<th>Pre-test SPQ</th>
<th>Post-test SPQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test SPQ</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test SPQ</td>
<td>.10</td>
<td>.42*</td>
<td></td>
</tr>
<tr>
<td>Follow-up SPQ</td>
<td>.00</td>
<td>.22</td>
<td>.56*</td>
</tr>
<tr>
<td></td>
<td>Monitoring</td>
<td>Pre-test BAT</td>
<td></td>
</tr>
<tr>
<td>Pre-test BAT</td>
<td>-.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test BAT</td>
<td>-.05</td>
<td>.31**</td>
<td></td>
</tr>
</tbody>
</table>

\(N = 33. \ *p < .01. \ **p < .05\)

The present study differed in important respects from the study of Steketee et al. (1989). Whereas Steketee et al. used a heterogeneous group of animal phobics, the present study relied exclusively on spider phobics. Furthermore, treatment involved two sessions in the Steketee et al. study, whereas in the present study subjects underwent one-session therapy. Also, Steketee et al. only obtained short-term outcome data. Nevertheless, the current study is in line with the Steketee et al. study as far as both studies failed to find a relationship between monitoring/blunting and short-term treatment outcome as indexed by self-reported fear (i.e. SPQ; FQ) and a behavioural test (BAT). Steketee et al. did suggest that there was an association between monitoring/blunting and treatment effect, but this suggestion was entirely based on heart rate data obtained during therapy sessions. However, the Steketee et al. study is silent about the extent to which heart rate data predict long-term therapy outcome. The current study found no association between coping style and long-term therapy outcome.

It could be argued that in the current study the reported coping style was influenced by the successful treatment. Note, however, that monitoring...
and blunting are considered to be trait variables (e.g. Miller, 1987). In addition, recent unpublished data indicate that the monitoring coping style is not affected by treatment. In a study with 42 spider phobics, paired t-tests showed that pre-test monitoring scores did not differ from monitoring scores at 18 months follow-up (Muris and de Jong, 1993).

Taken together, the present results do not confirm the suggestion of Steketee et al. (1989) that monitoring/blunting coping style is an important factor affecting exposure treatment outcome. Neither short-term nor long-term data indicate that monitoring/blunting is related to exposure success. It remains to be seen whether this conclusion holds for other phobia types.

References


