

## Letter

### Behavior Therapy of Phobias: Predictors of Outcome

To the Editors:

Although behavior therapy is often beneficial in treating phobias, approximately 20% of patients do not improve (Marks, 1981). Despite a few prior studies, data are limited on variables useful in predicting outcome and followup status of behavioral treatment. Therefore, we retrospectively evaluated several potentially predictive variables in 41 drug-free phobic patients (32 simple, 7 social, and 2 agoraphobics) who received a standard course of individually conducted exposure therapy (mean age = 33 years, 21 males). The variables were habituation during treatment (4-point scale: rapid, slow, or no habituation, or sensitization), maintenance of treatment effect between sessions (5-point scale: improved further, maintained effect, minor relapse, major relapse, worse than before prior session), generalization of therapeutic effect to other phobic objects (5-point scale: excellent, good, fair, poor, none), followup avoidance (9-point scale: would not avoid-always avoid) and followup impairment (9-point scale: no phobia-very severely disabling phobia). Mean time of followup was 7 months after completion of treatment. All ratings were done by the treating clinician.

The mean duration of therapy was 6.8 (SD 4.6) hours. Among several variables studied, the most consistent pretreatment predictors of therapy outcome were age of phobia onset (but not duration) and number of family members with phobias, as identified by the patient (proband). Mean age of onset was 19.4 (SD 13.4) years, and mean number of affected relatives was 1.4 (SD 2.5). Multiple correlations of these two variables were significant for habituation ( $r = 0.58, p < 0.001$ ),

maintenance of treatment effect ( $r = 0.49, p < 0.01$ ), generalization of therapeutic effect ( $r = 0.58, p < 0.001$ ), and followup avoidance ( $r = 0.54, p < 0.03$ ) and impairment ( $r = 0.61, p < 0.01$ ). Similar patterns were observed when calculations were performed with simple phobics only (multiple  $r$ 's = 0.63, 0.50, 0.62, 0.61, and 0.67, respectively; all  $p < 0.05$ ), and also with patients ( $n = 19$ ) who had agoraphobia or simple phobias associated with agoraphobia (Cameron, 1985) (multiple  $r$ 's = 0.55, 0.41, 0.67, 0.64, 0.65, respectively; all  $p < 0.05$ ).

An older age of onset (even in relatively homogeneous groups of simple phobics or agoraphobics) and/or a greater number of family members with phobias appears to predict both a poorer response to behavior therapy and, consequently, a poorer status at followup. These results were not specifically predicted, and therefore should be interpreted cautiously in a retrospective study. Nevertheless, the finding with age of onset is similar to that for obsessive-compulsives (Foa et al., 1983a, 1983b), and the result with family history is reminiscent of the finding of Hudson (1974) in agoraphobics. It is possible that older age of onset represents an "atypical" treatment-resistant disorder, while a greater number of family members indicates a stronger loading for the disorder (i.e., more severe) which is less treatment responsive. Note, however, that these two variables accounted for only  $\leq 45\%$  of the variance in treatment effect. It seems inappropriate to deny any patient a trial of behavior therapy solely on the basis of poor prognosis as predicted by these two variables. Further research is needed.

## References

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