

Marital Adjustment and Treatment Outcome in Agoraphobia

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Summary: Forty agoraphobics had individual exposure treatment over a period of 28 weeks and were followed up for two years. Outcome in the 27 married patients was as favourable as that in the 13 single patients. However, among the married patients greater improvement occurred in those with better initial marital and sexual adjustment, although even those with poor initial marital adjustment improved significantly during treatment and maintained that improvement during follow-up. Good initial work adjustment and social adjustment were also predictive of particularly good outcome. Reduction of phobias was accompanied by stable or improved marital, sexual, social and work adjustment.

There are many contradictory opinions about the relationships between marriage and neurosis. In particular, there is disagreement over whether marriages deteriorate as agoraphobia improves with treatment.

The suggestion that the husbands of agoraphobic patients should be included in the treatment programme was made by Webster (1953) and Lazarus (1966). Treatment was given to couples in a controlled study by Cobb *et al* (1980): eleven phobic or obsessive-compulsive patients with severe marital problems received either conjoint directive marital therapy or conjoint exposure therapy aimed at improving the phobic-obsessive problems. Whereas marital therapy helped only the marital problems, exposure therapy helped both phobic-obsessive and marital problems. The authors concluded that even for patients with both phobic-obsessive and marital problems exposure was the treatment of choice, and that the contrary result of Stern & Marks (1973) in one case was atypical.

Two other controlled studies have examined the effect on marriage of self-exposure treatment of agoraphobia (O'Brien *et al*, 1982; Cobb *et al*, 1984). In both studies the agoraphobics showed either improved or stable marital adjustment after exposure had reduced their phobias. This applied equally, whether or not the subjects' husbands had played an active part in the treatment. It is not known, of course, how the marriages would have fared without exposure treatment.

Previous studies of our sample

As part of a double-blind study, Marks *et al* (1983) treated 45 patients with severe chronic agoraphobia (conforming broadly to DSM III criteria) by exposure combined with either imipramine or placebo, over a period of 28 weeks. All the subjects received systematic instruction in exposure homework and were asked to record their exposure tasks

in a diary. In addition, half of each drug-group received six sessions of therapist-aided exposure *in vivo*, the other half receiving six sessions of therapist-aided relaxation.

Patients improved on nearly all measures of psychopathology by the end of the treatment, and the gains were maintained at follow-up one year after the start of treatment. There was no significant drug effect at any time, and the limited positive effect on phobias of therapist-aided exposure did not last beyond the end of treatment. Marks *et al* concluded that the subjects' improvement was largely attributable to the exposure homework.

In a subsequent study (Cohen *et al*, 1984) 40 of the subjects were followed up after two years. Two-thirds of the patients were still significantly less phobic and less prone to spontaneous panics than they had been before treatment, and there was no significant difference between the four sub-groups which had received different treatments.

These 40 subjects form the sample of the present study, which focusses particularly on the 27 who were married. These 27 were distributed almost equally across the four sub-groups. The study examines the following questions for the two-year period starting at the beginning of treatment:

1. Did married patients differ in outcome from single patients?
2. Did an initially poor marital relationship predict poorer outcome of exposure treatment for agoraphobia?
3. Was improvement in phobias associated with a deterioration in the marriage or a worsening of other problems?

Method

Assessments

The first eight measures were described in detail in the original paper (Marks *et al*, 1983) and in the 2-year follow-up report (Cohen *et al*, 1984). Some measures were rated

by the patient, some by an independent blind assessor. Lower scores correspond to better mental health, on all measures.

- M 1. *Four phobic target problems* (Gelder & Marks, 1966)
Each rated on a scale of 0–8
Total score range 0–32
Rated (a) by an assessor
(b) by the patient
- M 2. *Fear Questionnaire (FQ)* (Marks & Mathews, 1979)
Sub-scales: (a) Agoraphobia
(b) Blood–injury phobia
(c) Social phobia
(a), (b), (c) rated on a scale of 0–40
(a) + (b) + (c) gives ‘total phobia’ (0–120)
(d) Global phobia (scored 0–8)
All rated by patient
- M 3. *Hamilton Depression Scale* (Hamilton, 1969)
Items 1–17
Score range 0–50
Rated by assessor
- M 4. *Wakefield Depression Inventory* (Snaith *et al.*, 1971)
Twelve items, each rated 0–3
Total score range 0–36
Self-rated by patient
- M 5. *FQ anxiety-depression* (Marks & Mathews, 1979)
Sub-scale of *Fear Questionnaire*, items 18–22
Score range 0–40
Self-rated by patient
- M 6. *Non-phobic anxiety in past week* (Zitrin *et al.*, 1980)
Score range 0–8
Self-rated by patient
- M 7. *Non-phobic spontaneous panics in past week* (Zitrin *et al.*, 1980)
Score range 0–8
Self-rated by patient
- M 8. *Global improvement* (Zitrin *et al.*, 1980)
Score range 0–8
Self-rated by patient
- M 9. *Modified Maudsley Marital Questionnaire (MMQ)* (modified from Crowe, 1978)
Nineteen items, grouped to give five sub-scores:
(a) Marital adjustment (items 1–10)
(b) Sexual adjustment (items 11–13)
(c) Orgasmic frequency (item 14)
(d) Work and social adjustment (items 16, 17, 19)
(e) Warmth (items 15, 18)
Each item was scored on a scale of 0–8; each sub-score was averaged across the constituent items to give a mean in the range 0–8.
Self-rated.
The questionnaire was given to both patients and spouses, but too few spouses completed it to make analysis of their responses worthwhile. The sub-scores were based on clusters of items to which

responses were generally inter-correlated at a high level of statistical significance.

The questionnaire is reproduced in the appendix.

- M 10. *Retrospective marital rating*
Marital adjustment *during treatment* was assessed retrospectively for 24 patients (for three married patients the information available in the notes was inadequate for this assessment). The assessment was performed at 2-year follow-up by a clinician who knew the patient from having assessed or treated them in the original trial.
Three sub-scores, each on a scale 0–8:
(a) Perceived quality of marital harmony (0 = good; 8 = poor)
(b) Intensity of relationship (0 = intense; 8 = no relationship)
(c) Perceived independence of agoraphobia and marital relationship (0 = independent; 8 = closely related)
The mean of (a), (b), (c) gave (d):
(d) Retrospective marital rating (scored 0–8)

Statistical analysis

Data were compared by *t*-tests, unless otherwise stated. Although it is widely believed that such parametric statistics should not be used with data which are not normally distributed, such tests are in fact robust in the face of departures from normality and may actually be preferable to non-parametric statistics (Everitt, 1979).

In several of our analyses we have compared only the data at the extremes of the distribution, and intermediate scores are not presented; but they are available from the authors for those interested. Some patients also failed to complete all the scales: this is a second cause of some totals being reduced.

Results

1. Married compared with single patients

Married patients comprised 4 men and 23 women, single patients 2 men and 11 women. The average duration of the marriages was 11 years. Compared with single patients, married patients were significantly older (37 vs 27 years, $P < 0.002$), had been agoraphobic longer (9 vs 4 years, $P < 0.003$), and had fewer spontaneous panics prior to treatment (mean scores of 2.5 and 4.3, $P < 0.05$). They did not differ significantly on any other measure of psychopathology before treatment, and single and married patients responded equally well to treatment.

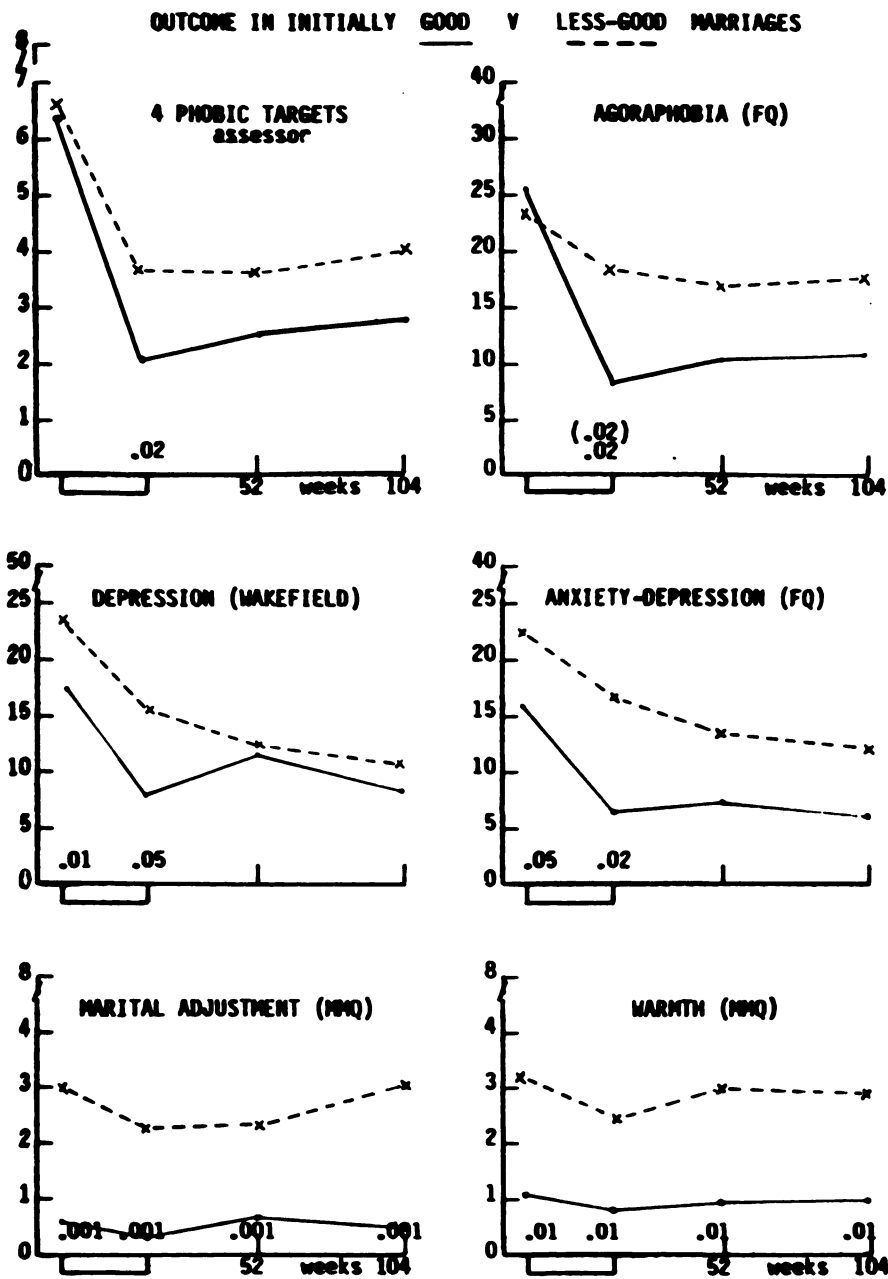
2. Marital adjustment before treatment

On the first ten items of the MMQ completed by the 27 married agoraphobics, 63% of the 270 individual scores were optimum (0) or nearly so (1). The mean marital adjustment score (M9a) was 1.5. This is very similar to the means obtained from comparable groups by three other workers using the MMQ:

1.1 for maritally satisfied controls (Crowe, 1978)

1.1 for agoraphobics not presenting with marital problems (Cobb *et al.*, 1984)

1.1 for maritally satisfied agoraphobics (Milton & Hafner, 1979)



▭ = treatment phase

FIG.1 Outcome of the 16 patients who began treatment with good marriages (—, scoring ≤ 1.1 on the 10-item MMQ) compared with that of the 11 patients who began with 'less-good' marriages (---, scoring > 1.8 on the MMQ). Lower scores indicate improvement. .02, .01 etc = significance of difference between groups at that point (ANOVA) (.02) = significance of overall gains from start to end of treatment (ANOVA)

None of the subjects in these samples presented with marital problems.

Our sub-sample of 11 patients classified as maritally *dissatisfied* on the basis of their M9a score had a mean M9a score of 2.9 and a mean sexual adjustment score (M9b) of 3.1. These figures are comparable to those found by Milton & Hafner for a similarly defined group (3.1 for marital adjustment, 3.0 for sexual adjustment) and by Crowe for patients presenting with marital problems (3.1 for marital adjustment, 3.4 for sexual adjustment). Very few of our patients had severely disturbed marriages, as measured by the MMQ.

3. Initial marital adjustment and outcome

On the basis of M9a scores (MMQ marital adjustment) we divided the 27 married subjects into 16 who had good marriages at the start of the treatment (M9a scores <1.1) and 11 whose marriages were 'less good' (M9a scores \geq 1.8).

Outcome—phobic raw scores

As indicated in Figure 1, the subjects with better marriages consistently had less pathology. They had significantly less depression before and just after treatment (M4, M5) but not at follow-up. They were also significantly less phobic immediately after treatment (M1a, M2a), with a continuing non-significant trend in this direction at follow-up (Figure 1). Patients with good marriages had better marital adjustment (M9a) and more warmth (M9e) throughout (Figure 1) and more global improvement (M8) immediately after treatment and at week 28 ($P < 0.05$, not seen in Figure 1).

Outcome—phobic change scores

Those with initially good marriages improved more at the end of treatment on total phobic avoidance (M2a+b+c, $P < 0.02$) and agoraphobia (M2a, $P < 0.02$). By 2-year follow-up, eventual outcome of phobias was the same in both groups. Patients with initially good marriages began with near-optimum ratings on the MMQ and retained these at the end of treatment and at 2-year follow-up.

4. Retrospective ratings of marital adjustment during treatment (M10)

At 2-year follow-up the assessors generally rated the patients as having had unsatisfactory marriages during treatment. Only 7 were judged to have a good marital relationship; in 2 cases the quality of the marriage was estimated to be indifferent; and 15 were assessed as having poor marriages. Good scores on M10 correlated significantly with good sexual adjustment at the start of treatment (M9b: $r = 0.57$, $P < 0.01$) but not with initial marital adjustment as measured by M9a.

Those with sound marriages (as rated by M10) were younger (mean age 32 vs 41 years) and had less pathology on nearly all measures (including two measures of phobia) after treatment and at the 2-year follow up.

5. Coital frequency and outcome

Raw scores

Those who before treatment were engaging in coitus more than once a week ($n = 12$) were compared with those not having intercourse at all ($n = 6$). The sexually active group

was significantly younger ($P < 0.001$), and at the time of the 2-year follow-up scored significantly better than the sexually inactive group on measures of phobia (M1b, M2a, M2d) and sexual adjustment (M9b)—see Figure 2.

Change scores

Those having more frequent coitus improved more from pre-treatment to 2-year follow-up on four phobic targets (M1b, $P < 0.005$) and sexual adjustment (M9b, $P < 0.005$).

6. Orgasmic frequency and outcome

Measurement of orgasmic frequency (M9c) before treatment gave a similar picture to that derived from coital frequency: compared with those who were orgasmic *less* than half the time ($n = 10$), those orgasmic *more* than half the time ($n = 16$) were significantly better before and after treatment and at 1-year and 2-year follow-up on several measures of phobia, general anxiety, global improvement and sexual adjustment.

7. Pre-treatment work satisfaction

Although the focus of this study was marital adjustment, a test was needed of whether this was a facet of a more general coping ability. Accordingly we analysed work satisfaction as a predictor of outcome.

Compared to initially less satisfied patients ($n = 9$, score = 3–8 on MMQ item 18), those who initially enjoyed work more ($n = 17$, score = 0–2) scored significantly better after treatment and at follow-up on phobic targets (M1a, M1b), present state of phobia ($P < 0.005$) and FQ agoraphobia (M2a, $P < 0.05$). They had significantly better Wakefield and FQ depression scores initially ($P < 0.05$) and better work and social adjustment throughout. At the 2-year follow-up they also rated their improvement as greater ($P < 0.01$) and their marital ($P < 0.005$) and sexual ($P < 0.02$) adjustment as significantly better.

Change scores

Compared to pre-treatment, satisfied patients improved more in terms of phobic targets after treatment (M1a, $P < 0.006$) and at 2-year follow-up (M1a, $P < 0.006$; M1b, $P < 0.02$).

8. Non-phobic v. phobic status at 2-year follow-up

Patients with good ($n = 16$) and 'less good' ($n = 11$) marriages on the first ten items of the MMQ were each sub-divided according to their mean score at 2-year follow-up on assessor-rated phobic targets (M1a: non-phobic = ≤ 2 , phobic = ≥ 3).

Within good marriages

Compared with those who were still phobic at the 2-year follow-up ($n = 6$), those who were non-phobic ($n = 8$) had not differed significantly before treatment; after treatment they were not only less phobic ($P < 0.05$ – $P < 0.001$ on various measures) and less depressed (FQ $P < 0.02$, Hamilton $P < 0.05$, Wakefield $P < 0.02$), but also had better work and social adjustment ($P < 0.05$). At the 2-year follow-up they were not only less phobic ($P < 0.001$ on all phobic measures) but were also less depressed (FQ $P < 0.05$, Hamilton $P < 0.001$, Wakefield $P < 0.02$) and had better sexual adjustment ($P < 0.02$) and warmth ($P < 0.05$).

Within 'less-good' marriages

Compared with those who were still phobic at 2-year follow-up ($n = 7$), those who were non-phobic ($n = 3$) had not differed significantly between before and after treatment and at the 2-year follow-up they were significantly less phobic ($P < 0.02$). At the 2-year follow-up they had improved sexually ($P < 0.01$).

Sexual adjustment irrespective of marital adjustment

See Figure 2, lower right-hand quadrant. Those who were non-phobic at the 2-year follow-up had either improved

sexually or retained their initially good sexual adjustment. Those who at 2-year follow-up were still phobic had slight (but not significant) worsening of sexual adjustment.

Discussion

When agoraphobia improves marriages usually remain stable or improve: In general as our patients' phobias improved their marriages either remained unchanged or improved slightly. Mean marital adjustment actually improved slightly in patients with initially 'less-good' marriages and remained sound in patients who had good mar-

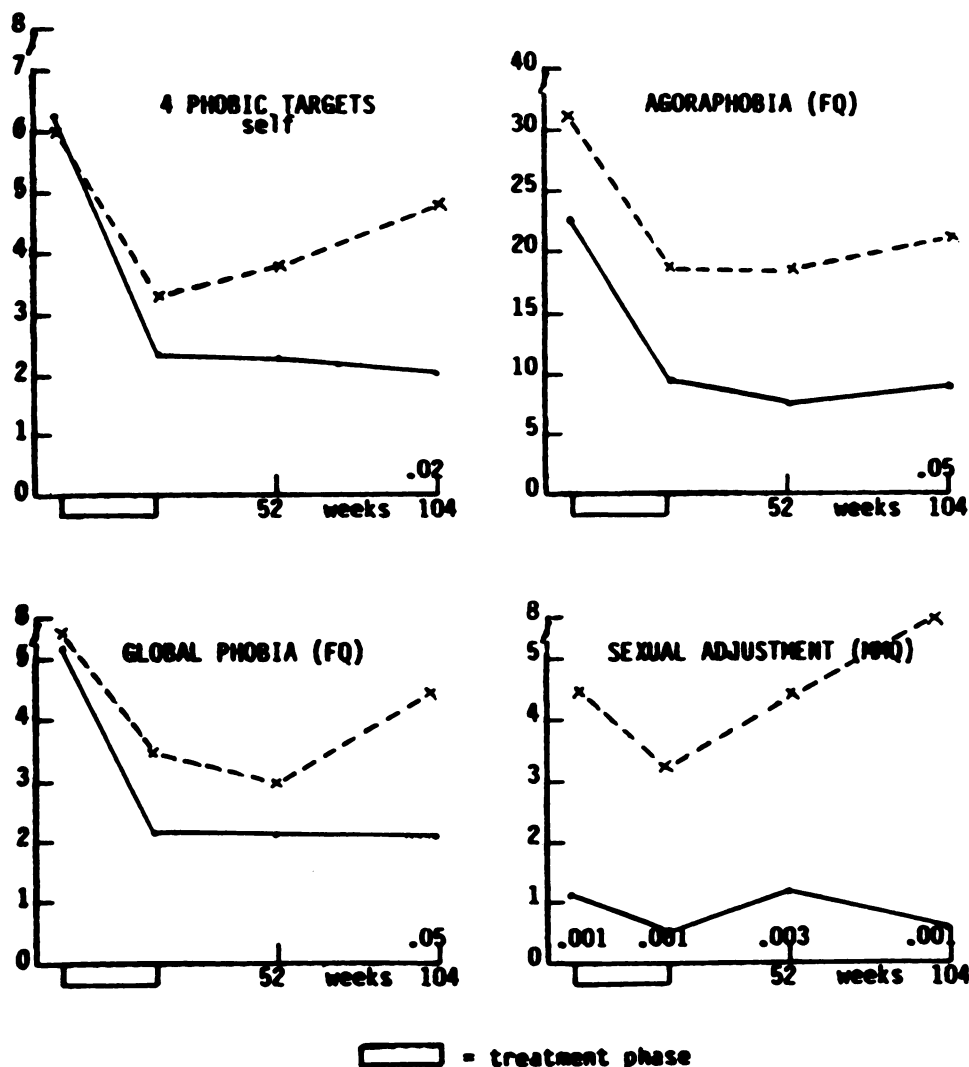


Fig.2 Outcome of the 12 agoraphobics who were having coitus more than once a week before treatment began (—) compared with that of the 6 who were not having coitus at all (---). Lower scores indicate improvement. .02, .05 etc = significance of difference between groups at that point (ANOVA)

riages to start with. Neither the MMQ nor the retrospective marital ratings produced any evidence of marriages deteriorating as phobias diminished. Sexual adjustment and depression also improved as phobias eased.

These findings agree well with the instructive report of Cobb *et al* (1984) who gave home-based exposure *in vivo* to 19 agoraphobics up to 6-months follow-up; marital and sexual adjustment improved as well as phobias, with a trend for patients with initially good marriages to do best until the 6-months follow-up; there was no evidence of symptom substitution. As agoraphobia remits the general rule is for marriages to remain unchanged or to improve, not worsen. Bland & Hallam (1981) similarly found that while their initially dissatisfied spouses remained so after treatment their satisfied spouses became more satisfied as patients' phobias improved.

In two further studies (Cobb *et al*, 1980; O'Brien *et al*, 1982) marital adjustment in most patients either improved or remained stable after exposure reduced their phobias. In addition, our findings concur with three more studies where, up to six months after exposure treatment, agoraphobics with initially good marriages improved more in their phobias and other neurotic symptoms than did those with initially poor marriages (Hudson, 1974; Hafner, 1976; Milton & Hafner, 1981).

Reconciliation with apparently conflicting literature: All the findings so far are the *opposite* to those expected from a symptom substitution model. In nearly all studies most marriages do not worsen but rather remain unchanged or improve as phobias ease. Exceptional cases can of course always be found whose marriages deteriorate as phobias improve (Cobb *et al*, 1984; Barlow *et al*, 1981; Hafner, 1976). When treated, most agoraphobics are in an age range with a high rate for separation and divorce and it is hardly surprising that occasional marriages go wrong in some series of agoraphobics, given that about one in three marriages end in divorce. We would also expect patients to occasionally marry in the course of a trial; one of our single patients (excluded from the analysis) did so. There is no evidence in any of the literature reviewed that such events happened more often than would be expected by chance. Substantial drop in marital satisfaction after exposure treatment was found in only 2 out of the 19 agoraphobics of Cobb *et al* (1984) and in only one of the six cases described by Barlow *et al* (1981), and that patient had *not* improved in her phobias.

Two claims which are contradicted not only by

our data, but also by the author's own data are first, that patients who were initially dissatisfied with their marriage increased in marital dissatisfaction after treatment (Milton & Hafner, 1979—in their table 1, after treatment initially unsatisfactory marriages actually slightly improved rather than worsened) and second, that husbands of initially hostile patients were adversely affected by their wives' improvement (Hafner, 1977*b*—contradicted by his tables 1 and 2).

A third claim, of a danger of symptom emergence as phobias improve (Hafner, 1976), is again not borne out by the author's own data (see Marks, 1981, p.239, and critiques by Stern, 1977, and Emmelkamp, 1982). Because this claim is widely cited it is important to note that his results in fact agree with ours. Hafner's patients who began with best initial marital adjustment improved most on all measures; conversely, those with poorest marital adjustment improved least in all areas, although they still improved significantly in phobias; only one measure (satisfaction with spouse) ended up any worse, and that not nearly significantly so.

Marital adjustment after clinical change may depend upon the pre-existing social field: We found that better initial marital adjustment predicted better outcome of phobias after treatment, although even patients with initially 'less-good' marriages improved significantly in their phobias after treatment and retained these gains two years later. In addition, patients with initially best marriages began and ended with less anxiety-depression. Better initial sexual, work and social adjustment also predicted better outcome on many measures after treatment and at 2-year follow-up. These findings agree with the results of Hafner (1976) illustrated above, although neither Cobb *et al* (1984) nor Emmelkamp (1980) found a relationship between initial marital adjustment and phobic outcome. There is thus less unanimity that patients who are best off to start with do best in the long run.

Our data and those of Hafner (1976) on this point seem to follow the biblical adage that 'unto every one that hath shall be given, and he shall have abundance'. In many health care problems those who begin better off are commonly those to gain most from any therapy. These results could be parsimoniously explained in terms of the *problem-solving capacity of the relevant social field* (Marks, 1981). This capacity decides the social repercussions of any change within that field. A marital or family group is likely to accommodate to change in the patient (whether improvement *or* deterioration) more easily if that group already has demon-

strably good problem-solving capacity and more poorly if that capacity is faulty. Indicators of problem-solving capacity might be good initial marital and social adjustment and job stability. Our finding that good work adjustment predicts better outcome supports this position.

Does poorer initial marital, sexual, work and social adjustment indicate greater severity or chronicity of phobias? Our data suggests it does not. The initial phobia scores of maritally adjusted and maladjusted patients did not differ significantly. They *did* differ in maritally maladjusted patients having more initial depression, which difference was no longer significant at follow-up. As yet we do not know whether such low mood is the product or the cause of the other problems being more severe, or perhaps both interacting, but once present low mood could reduce the benefits of exposure treatment by decreasing motivation and compliance and perhaps by slowing habituation.

Agoraphobic marriages: Findings from our patients, who complained mainly of agoraphobia, not of marital difficulties, may not necessarily apply to patients who present with both problems, although the results of Cobb *et al* (1980) suggest that they do. Most of the patients rated themselves as maritally satisfied, although nearly a quarter were not having coitus, and over one-third were anorgasmic much of the time. Patients who were phobically well at two years had improved significantly more in sexual adjustment compared with those who were less phobically well. This again goes against the symptom substitution model. Those who are able to profit from treatment in one area are more likely to improve in other functions as well. Frequent sexual problems in agoraphobics were also found by Buglass *et al* (1977) and by Hand & Lamontagne (1976), but no control figures are available for comparison with their or our studies.

Although early studies found that neurotics were more likely to have neurotic spouses than were controls (Slater & Woodside, 1951; Kreitman, 1964; Buck & Ladd, 1965) the spouses of agoraphobics in most series have not been neurotic (Agulnick, 1970; Buglass *et al*, 1977; Cobb *et al*, 1984; Hafner, 1977a). In the only controlled study of this issue agoraphobics' marriages were similar to controls on nearly all social and domestic measures (Buglass *et al*, 1977). Neither Agulnick (1970) nor Hafner (1977a) found a significant relationship between the duration or severity of agoraphobia and neurosis in the husband. In the patients of Cobb *et al* (1984) the spouses of agoraphobics were not neurotic as a group nor did they suffer personally or

in their marriages when the patients' agoraphobia improved. Our present study could not examine these latter points for lack of sufficient ratings from spouses.

Need for better marital scales: Self-ratings on the MMQ did not always reflect marital problems which an observer thought might be present. Our retrospective ratings highlighted how difficult it can be to compare relationships. Marital arguments may be fine for some but intolerable to others. Equally, some are satisfied with polite and minimal contact which would be unacceptable to many. Moreover, patients may regard as helpful some behaviour by the spouse which the therapist considers a barrier to improvement, e.g. encouragement of avoidance. Brief ratings to capture such marital subtleties remain to be devised.

In conclusion: Marriages usually remain stable or improve further as phobias ease after exposure, contradicting the symptom substitution model. Single cases behaving differently do exist but are exceptions to the more general rule in nearly all studies. The social repercussions of clinical change might be predicted from the pre-existing problem-solving capacity of the social field in which the patients' change is occurring, disruption being least where that capacity is good.

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Appendix — Maudsley Marital Questionnaire

We used a shortened version of the Maudsley Marital Questionnaire published by Crowe (1978). Each of the 19 items of the modified MMQ is rated by the subject on a scale of 0–8, with 0 representing the optimum response. This version of the MMQ is very similar to that used by Cobb *et al* (1984).

1. How frequently do you think of separating from your partner?
2. How satisfactory is life with your partner (sex apart)?
3. Do you feel your partner is a good or bad husband/wife?
4. Are you satisfied with the amount of leisure activity that you both share in—for example, gardening, entertainments, trips, etc?
5. How much undesirable quarrelling, nagging, tension, coolness or violence is there in the marriage?
6. When you have arguments, are you able to reach a compromise?
7. Can you confide in your partner as much as you wish?
8. Do you get enough warmth and understanding from your partner?
9. Does your partner take his/her full share of responsibility in the marriage?
10. Is your partner attractive to you as a person (physical attraction apart)?
11. How often have you had sexual intercourse with your partner over the last month?

12. Are you satisfied with the present frequency of sexual intercourse?
13. How enjoyable is sex with your partner?
14. How often during sex with your partner did you have a climax?
15. How satisfied are you with the amount you cuddle, kiss and touch one another?
16. Are you competent and successful at your job and/or housework?
17. Is your work/housework satisfying and enjoyable at present?
18. Do you have any quarrels, upsets or coolness with people apart from your partner?
19. Do you have a satisfactory social life (friends, outside leisure activities, etc.)?

References

- AGULNIK, P. L. (1970) The spouse of the phobic patient. *British Journal of Psychiatry*, **117**, 59–67.
- BARLOW, D. H., MAVISSAKALIAN, M. & HAY, L. R. (1981) Couples treatment of agoraphobia. *Personality & Individual Differences*, **1**, 341–346.
- BLAND, K. & HALLAM, R. S. (1981) Relationship between response to exposure and marital satisfaction in agoraphobics. *Behaviour Research and Therapy*, **19**, 335–338.
- BUCK, C. & LADD, K. (1965) Psychoneurosis in marital partners. *British Journal of Psychiatry*, **111**, 587–590.
- BUGLASS, D., CLARKE, J., HENDERSON, A. S., KREITMAN, N. & PRESLEY, A. S. (1977) A study of agoraphobic housewives. *Psychological Medicine*, **7**, 73–86.
- COBB, J. P., McDONALD, R., MARKS, I. & STERN, R. (1980) Marital vs. exposure therapy—Psychological treatment of co-existing marital and phobic-obsessive problems. *Behaviour Analysis and Modification*, **4**, 3–16.
- MATHEWS, A. M., CHILDS-CLARKE, A. & BLOWERS, C. M. (1984) The spouse as co-therapist in the treatment of agoraphobia. *British Journal of Psychiatry*, **144**, 282–287.
- COHEN, S. D., MONTEIRO, W. & MARKS, I. M. (1984) Two-year follow-up of agoraphobics after exposure and imipramine. *British Journal of Psychiatry*, **144**, 276–281.
- CROWE, M. J. (1978) Conjoint marital therapy: a controlled outcome study. *Psychological Medicine*, **8**, 623–636.
- EMMELKAMP, P. M. G. (1980) Agoraphobics' interpersonal problems. *Archives of General Psychiatry*, **37**, 1303–1306.
- (1982) *Phobic and Obsessive-Compulsive Disorder*. New York: Plenum.
- EVERITT, B. S. (1979) A Monte Carlo investigation of the robustness of Hotellings—One and Two Sample T2 Tests. *Journal of American Statistical Association*, **74**, 48–51.
- GELDER, M. G. & MARKS, I. M. (1966) Severe agoraphobia: a controlled prospective trial of behaviour therapy. *British Journal of Psychiatry*, **102**, 309–319.
- HAFNER, R. J. (1976) Fresh symptom emergence after intensive behaviour therapy. *British Journal of Psychiatry*, **129**, 378–383.
- (1977a) The husbands of agoraphobic women: assortative mating or pathogenic interaction? *British Journal of Psychiatry*, **130**, 233–239.
- (1977b) The husbands of agoraphobic women and their influence on treatment outcome. *British Journal of Psychiatry*, **131**, 289–294.
- HAMILTON, M. (1969) Standardized assessment and recording of depressive symptoms. *Psychiatrica, Neurologica, Neurochirurgica*, **72**, 201–205.
- HAND, I. & LAMONTAGNE, Y. (1976) The exacerbation of interpersonal problems after rapid phobia removal. *Psychotherapy: Theory, Research and Practice*, **13**, 405–411.
- & MARKS, I. (1974) Group exposure (flooding) *in vivo* for agoraphobics. *British Journal of Psychiatry*, **124**, 588–602.
- HUDSON, B. (1974) The families of agoraphobics treated by behaviour therapy. *British Journal of Social Work*, **4**, 51–59.
- KREITMAN, N. (1962) Mental disorder in married couples. *Journal of Mental Science*, **108**, 438–446.
- (1964) The patient's spouse. *British Journal of Psychiatry*, **110**, 159–173.
- LAZARUS, A. (1966) Broad-spectrum behaviour therapy and treatment of agoraphobia. *Behaviour Research & Therapy*, **4**, 95–7.
- MARKS, I. M. (1981) *Cure and Care of Neuroses*. New York: John Wiley.
- & MATHEWS, A. M. (1979) Brief standard self-rating for phobic patients. *Behaviour Research & Therapy*, **17**, 263–7.
- GRAY, S., COHEN, S. D., HILL, R., MAWSON, D., RAMM, E. & STERN, R. S. (1983) Imipramine and brief therapist-aided exposure in agoraphobics having self-exposure homework. *Archives of General Psychiatry*, **40**, 153–162.
- MILTON, F. & HAFNER, J. (1981) The outcome of behaviour therapy for agoraphobia in relation to marital adjustment. *Archives of General Psychiatry*, **36**, 807–12.
- O'BRIEN, G. T., BARLOW, D. H. & LAST, C. G. (1982) Changing marriage patterns of agoraphobics as a result of treatment. In *Phobias*, ed. R. Dupont. New York: Brunner Mazel.
- SLATER, E. & WOODSIDE, M. (1951) *Patterns of Marriage*. London: Cassell.
- SNAITH, R. P., AHMED, S. N., MEHTA, S. & HAMILTON, M. (1971) Assessment of the severity of primary depressive illness: Wakefield Self-Assessment Depression Inventory. *Psychological Medicine*, **1**, 143–149.
- STERN, R. (1977) Letter. *British Journal of Psychiatry*, **130**, 418.
- & MARKS, I. M. (1973) Contract marital therapy in obsessive-compulsive neurosis with marital discord. *British Journal of Psychiatry*, **123**, 681–684.
- WEBSTER, A. S. (1953) The development of phobias in married women. *Psychological Monographs*, **67**, 17, 1–18.
- ZITRIN, C. M., KLEIN, D. F. & WOERNER, M. G. (1980) Treatment of agoraphobia with group exposure *in vivo* and imipramine. *Archives of General Psychiatry*, **37**, 63–72.

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