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EVALUATION OF BEHAVIORAL SEX THERAPY IN THE TREATMENT OF SECONDARY ORGASMIC DYSFUNCTION: THERAPEUTIC FORMATS, COMPONENTS OF TREATMENT AND PROGNOSTIC FACTORS

Final Report

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The field of human sexual behavior is currently of much public and professional interest. It is becoming increasingly evident that there is a high incidence of couples experiencing distressing sexual problems. One study, focusing on low-income families in urban Quebec revealed that, in a sample of 250 couples, 21% of the females and 13% of the males complained of impaired sexual functioning (Gourgues & Cloutier, 1977). Another study investigated the phenomenon of late divorce in 229 Quebec residents. The results indicated that 63% of the males complained of sexual dissatisfaction during the marriage. Of these, 32% reported that sexual problems were the real reason for divorce. Seventy-five per cent of the divorced females reported sexual dissatisfaction during the marriage, although only 3% believed this to be the main cause for the divorce (Deckert & Langelier, 1977). The particular problem selected for the present study, secondary orgasmic dysfunction in women, has been estimated to involve, in varying intensity, up to 50% of the female population (Jehu, 1979).

Sexual disorders are extremely enduring. Statistics compiled from the data of 58 couples seeking help at the Sexual Dysfunction Service of the Jewish General Hospital in Montreal during the year 1976-77 revealed the average duration of sexual problems to be approximately seven years, with a range of three months to 20 years (Libman, 1977).

There is considerable evidence in the literature that couples who present at mental health agencies with severe marital problems also manifest sexual problems (Azrin, Naster & Jones, 1973; Clark & Wallin, 1965; Edwards

& Booth, 1976, Quick & Jacob, 1973). Similarly it has been found that couples with a sexual problem who seek sex therapy also perceive their marital happiness as impaired, relative to well-functioning couples (Libman, Takefman, & Brender, 1980). An un published study by Cohen & Brender (1977) has revealed that sexual difficulties in couples are related both to a lower interest in having children and to an increased incidence of social difficulties in the children who already are part of the family.

The high incidence of sex problems in the married population, the tendency for these problems to persist for years, the relation of impaired sexual functioning to marital and family disturbances, all constitute cogent reasons for concern about the quality of sexual functioning among couples of all ages. The experimental evidence emphasizes the urgent need to develop economical and effective treatment procedures for sexual disorders.

In addition to the need for the development of cost-effective treatments is the need to establish standards of treatment quality. This is of particular importance in the area of sex therapy, where the public is currently being offered a vast range of treatments. Many of these are very costly and are of unassessed benefit (Koch & Koch, 1976).

Traditional psychotherapy, which has focused on the historical causes for sexual problems in couples, has tended to be time-consuming and expensive. Evaluation studies of psychotherapy treatment effectiveness have generally suffered from various methodological weaknesses (Kilmann, 1978; Kilmann & Auerbach, 1979; Sotile & Kilmann, 1977; Wright, Perreault & Mathieu, 1977). As a result, the effects of psychotherapy on sex problems are unclear.

The efficacy of direct sexual skills training procedures, where the aim is to alter immediate causes of sexual difficulties, has been well demonstrated. The most comprehensive and persuasive account of this approach was provided

by Masters and Johnson (1970). Although their methodology for assessing outcome has been questioned (Zilbergeld & Evans, 1980), well controlled studies comparing directive Masters & Johnson type sex therapy to other approaches, such as supportive and interpretative therapies (Crowe, 1976) and counseling (Mathews, Whitehead, Hackmann, Julien, Bancroft, Gath & Shaw, 1976) have shown that there is greater improvement with the directive sexual skills training approach.

Subsequent adaptations of Masters and Johnson's methods which have been reported (e.g., Annon, 1974; Brender & Burstein, 1976; LoPiccolo, 1975), in the numerous review papers comparing and evaluating various treatments for sexual dysfunction, have confirmed that some form of directive behavioral approach is most effective for the alleviation of sexual distress (Kilmann & Auerbach, 1979; Marks, 1981; Sotile & Kilmann, 1977; Springer, 1980; Wright et al., 1977).

More recently, sex therapists have been turning to the task of developing more efficient and economical ways of providing treatment. To this end, investigations are proceeding in two general directions: one category of study manipulates the format or context in which sex therapy is delivered, the other attempts to isolate and evaluate the effective components in the multifaceted sexual skills training packages.

Therapy Format Studies

A variety of therapeutic contexts have been explored in an effort to provide low cost and effective sex therapy services. Masters and Johnson originally advocated the use of a male and female co-therapy team, couples seen individually, in an intensive (daily) two week program. Subsequent research has investigated the specific effects of one versus two therapists, "massed" versus "spaced" sessions, group versus couple or individual therapy,

and variation in amount of therapist contact ranging from self-help or minimal to intensive contact.

Number and Gender of Therapists

Within the individual couple context, two studies, where the sample included a range of sexual disorders, varied the number of therapists present at each session (i.e., one versus two) as well as the gender of the therapist. No significant differences in therapy outcome were found (Arentewicz & Schmidt, 1980; Crowe, Gillan & Golombok, 1981).

Timing of Therapy Sessions

One study examined the time frame of group therapy sessions either for couples or for the affected partner only. The sample consisted of subjects whose presenting problem was primary orgasmic dysfunction in the female. Variation in the timing of therapeutic sessions revealed that "massed" (two sessions per week for five weeks) and "spaced" sessions (one session per week for 10 weeks) were equally effective (Ersner-Hershfield & Kopel, 1979). In another study, the same variable was investigated in a sample of 202 couples with a range of sexual difficulties. No difference in therapeutic effectiveness between "intensive" (17 daily sessions over a three week period) and "longterm" (35 sessions twice per week over 18 weeks) was found (Arentewicz & Schmidt, 1980). Since in this latter study the number as well as the timing of therapy sessions differed, the independent effect of either variable cannot be interpreted. Ahother investigation of session frequency examined the effect of five monthly as compared with 16 weekly therapy sessions on lack of sexual responsiveness in the female. Results indicated that both time frames were equally effective (Carney, Bancroft & Mathews, 1978). This study, however, confounded not only number and timing of sessions, but also included concurrent administration of testosterone or

diazepam along with sex therapy. Interpretation of each of these variables separately, therefore, is not possible.

Group Therapy

A number of studies have evaluated the effects of a group format on changes in sexual functioning and satisfaction. Problem categories have included: primary non-orgasmic dysfunction in women (Barbach, 1974; McGovern, Kirkpatrick & LoPiccolo, 1978; Schneidman & McGuire, 1976; Wallace & Barbach, 1974), secondary non-orgasmic dysfunction in women (Barbach & Flaherty, 1980; Price & Heinrich, 1977), mixed samples of sexual dysfunctions (Price, Heinrich & Golden, 1980; Zilbergeld, 1975), premature ejaculation (Kaplan, Kohl, Pomeroy, Offit & Hogan, 1974; Zeiss, Christensen & Levine, 1978) and erectile dysfunction (Lobitz & Baker, 1979) in males. In general, these studies have demonstrated that group therapy improved functioning for each problem category.

Controlled comparison studies of groups composed either of couples or the affected individuals only have corroborated the effectiveness of the group format. For example, Ersner-Hershfield and Kopel (1979), working with a sample of 22 pre-orgasmic women, compared a couples group and a women only group format. Improvement in both individual and couple sexual functioning was demonstrated in both conditions. A similar design with a sample of males complaining of premature ejaculation was conducted by Perelman (1977). He also found both formats equally effective in improving both ejaculatory control and overall level of sexual functioning. Treated groups were found to be superior to an untreated control group. Two studies compared standard couple therapy with group couple therapy. Findings indicated that even when both partners had a sexual problem and couples varied widely in emotional stability, motivation, education, age and cultural background, group and couple therapy

appeared equally effective (Golden, Price, Heinrich & Lobitz, 1978; Leiblum, Rosen & Pierce, 1976).

Minimal Therapist Contact

Another important question to examine is the effect of varying the amount of therapist contact within the context of an effective therapy program in order to achieve maximal efficiency. Several studies have investigated this issue. In an unpublished pilot study, Brender and Blaukopf 1976) conducted structured therapist-run group sessions for women witn primary orgasmic disorder and provided individually assigned reading materials to other women with similar difficulties. The results suggested that the individual subjects assigned reading materials only, with minimal therapist contact, achieved a degree of symptom reversal similar to that of women in the more traditional therapist-run group sessions. The two samples differed in age, making direct comparison of treatments impossible, however the results raised the possibility that, for certain sexual problems in a certain population (e.g., young couples), factual information in a permission-giving context may suffice to resolve the difficulty without additional regular therapist contact. A well controlled study by Mathews et al. (1976) evaluated the intensity of therapist-client interaction. Using a behavioral and directive therapy program and a sample which included both male and female sexual problems, a comparison was made between maximal (one or two therapists present at each of 10 therapy sessions) and minimal (weekly exchange of letters) therapist contact. No clearly significant differences in outcome between these two conditions were found. Heinrich (1976) explored behavioral-educational treatment with and without a therapist in a sample of women complaining of primary orgasmic dysfunction. The relative efficacy of therapist-run groups was compared with a self-help treatment program. The

results indicated that improvement occurred in both conditions, but the therapist-led form of treatment was clearly more effective. Results of studies evaluating optimal therapist-client contact are equivocal. In addition, experiments evaluating this dimension tend to differ in terms of sample composition, and combinations of couple, group and minimal contact therapy, making it impossible to judge the effectiveness of this component alone.

A number of investigations have studied the effect of "self-help" or minimal therapist contact bibliotherapy programs alone. One bibliotherapy study, working with a sample which included a range of sexual disorders, concluded that a behavioral sex therapy program in written format was effective for those couples who followed the program, at least in the short term. However, data were not systematically collected and the drop out rate was considerable: 19 out of an original 30 couples (Kass & Strauss, 1975). Lowe and Mikulas (1978) assessed the effects of a bibliotherapy program plus twice per week telephone contact with a therapist on a sample of 10 couples where the presenting problem was premature ejaculation in the male. Their results indicated significant improvement over waiting list controls. However, their sample size was very small (5 per group), their program lasted an average of only 3 weeks, the measure of improvement was a time estimate by the male of latency to ejaculation, and no follow-up data were reported. Zeiss (1978), using a similar sample, demonstrated that while 12-20 weeks of minimal therapist contact (6 minutes per week telephone contact) including bibliotherapy was almost as effective as standard couple treatment, there were no successful cases in a no-therapist contact bibliotherapy condition. It should be noted that the program addressed only one problem, premature ejaculation, and that 3-6 month follow-up data indicated that only 50% of

subjects successful at post-therapy testing were considered successful at follow-up. Another study which selected a sample of predominantly secondary non-orgasmic women reported significant improvement with minimal contact bibliotherapy as compared with a delayed treatment information control (Dodge, Glasgow & O'Neil, 1982).

In summary, review of the literature evaluating different formats for the delivery of behavioral sex therapy indicates that one therapist is as effective as two, the gender of the therapist does not influence therapeutic outcome, and massed and spaced therapy sessions produce equivalent therapeutic effects. In addition, group therapy, minimal contact bibliotherapy and standard couple therapy have all demonstrated some value. However, the relative effectiveness of each of these three conditions, in homogeneous problem samples, with therapy content held constant, has yet to be determined and will be addressed in the present investigation.

Effective Components of Therapy

A second major direction of therapy outcome research is the identification of therapeutic components within a given program and an evaluation of their respective contributions.

Most cognitive-behavioral sex therapy programs are designed to elicit improvement in the following four areas: knowledge concerning sexual functioning, acquisition of sexual skills, effective communication between partners, and anxiety reduction. The therapy "package" includes a variety of techniques or components, for example: specific sexual skills acquisition such as masturbation training or sensate focus exercises; specific attention to anxiety reduction, such as systematic desensitization or a temporary ban on complex problematic sex acts, for example intercourse; focus on communication training. Occasionally, chemotherapy, in the form of tranquillizers or hormones, has been used either alone or in conjunction with the other components mentioned

above.

Some research has been carried out to evaluate the independent and additive effects of selected therapeutic components.

Sexual Skills Training

An evaluation of directed masturbation in the treatment of primary nonorgasmic women concluded that this technique was more effective than "sensate focus" (training in communication of caressing tastes and preferences) plus supportive psychotherapy (Riley & Riley, 1978).

Systematic Desensitization of Anxiety

Auerbach and Kilmann (1977) found systematic desensitization to be more effective for males with secondary erectile disorder than was relaxation training alone. Another study, investigating the effects of anxiety reduction on sexual responsiveness in a sample of non-responsive women, found systematic desensitization to be effective in raising sexual responsiveness post therapy (O'Gorman, 1978). In a series of three studies comparing systematic desensitization with a Masters and Johnson program, it was found that systematic desensitization and sexual skills training achieved comparable results in a large sample of women with orgasmic difficulties, and of men with erectile and premature ejaculation problems (Everaerd, 1977).

Communication and Ban on Intercourse

Takefman and Brender (1982) compared instructions to improve sexual communication alone, and these instructions in addition to anxiety reduction in the form of a ban on intercourse. They demonstrated that the sexual communication condition and the sexual communication plus ban on intercourse condition were equally effective in a sample of males manifesting erectile difficulties.

Interaction of Therapeutic Components

Reviews of treatment outcome with primary and secondary nonorgasmic women tentatively suggest that: a) desensitization might be most appropriate for women whose sexual anxiety contributes to secondary orgasmic dysfunction,

b) techniques which emphasize sexual and nonsexual communication might be more effective for secondary, as opposed to primary women, and c) desensitization plus sexual skills training would be more effective for primary than for secondary nonorgasmic women (Jehu, 1979; Kilmann, 1978; Marks, 1981). Kilmann's review is noteworthy in that it is one of the few which suggests that the effectiveness of components in behavioral sex therapy packages may interact with patient and problem characteristics.

Chemotherapy

Carney et al. (1978) used a somewhat different experimental design involving a chemical intervention. These investigators found that sexually unresponsive women improved significantly more when a behavioral approach was combined with a small dose of testosterone which presumably heightened sexual interest and arousal (i.e., increased motivation) rather than with diazepam, which, theoretically reduced anxiety.

Categorization of Sexual Problem

In addition to evaluating the context in which therapy is delivered and the effectiveness of various therapy components, a number of investigators have addressed the issue of subject variability within a given problem category. They have shown that the different sexual dysfunctions may respond differentially to a sexual skills training program, and, for this reason, have recommended that effects of different therapy formats and components be investigated in homogeneous samples (Brender, Libman, Burstein & Takefman, 1982; Hogan, 1978; Jehu, 1979, 1980; Kilmann, 1978; Kilmann & Auerbach, 1979).

Even in the selection of a particular problem category for investigation, the issue of subject variability within the sample should be considered. The importance of precise categorization of a sexual problem may be elaborated by a brief review of attempts to define the problem area selected for the present study - secondary orgasmic dysfunction in women.

"Orgasmic dysfunction" has been used to refer to a range of female sexual responsiveness characteristics. Initially, orgasmic dysfunction was conceptualized as an inability to experience orgasm under either the appropriate conditions or in response to appropriate sexual stimulation. For example, a woman would be defined as "frigid" if she were unable to experience orgasm during intercourse, regardless of whether she were orgasmic by non-coital stimulation (e.g., Kleegman, 1959; O'Connor & Stern, 1972; Weiss & English, 1943). Similarly, she would be considered "frigid" if she failed to experience so-called "vaginal", as opposed to "clitoral" orgasm (e.g., Abraham, 1956; Freud, 1932, 1950, 1962).

Both of these assertions have been questionned. Masters and Johnson (1970a) conceive of sexual functioning as an interaction between two sexual systems, the biophysical (healthy body, anatomically functional sex orgasm) and the psychosocial (set of values and attitudes relating to sex). Kaplan (1974) describes sexual dysfunctions in terms of their history and the circumstances under which they occur. Orgasmic disorders would be classified as primary (the woman has never experienced orgasm) or secondary (the disorder developed after a period of being able to reach orgasm). The problem may be absolute (no orgasmic experience under any circumstances) or situational (orgasm is experienced only under limited specific circumstances).

Sotile, Kilmann and Scovern (1977) have refined and elaborated this concept. They suggest that orgasmic disorders be described in terms of the point along the female sexual response cycle at which inhibition of arousal or performance occurs. In addition, they suggest extensive description of individual modes of responsivity (see Table 1). Their system basically combined and incorporated various concepts contained in separate, already existing classificatory schemes (e.g., Bergler, 1944; Kaplan, 1974; Masters & Johnson, 1970 a).

Table A

Sotile, Kilmann and Scovern (1977) Classificatory System for Orgasmic Dysfunction

Type of Disorder	Specific subtypes	General subtypes
Orgasmic dysfunction	1. repeated mounting arousal 2. inability to maintain arousal 3. only slight arousal	1. according to history: a) primary b) secondary 2. Circumstances: a) absolute b) situational i) coital ii) masturbatory iii) random iv) other 3. Affect: a) feeling of aversion b) no feeling of aversion

The Psychological and Statistical Manual (DSM III) compiled by the American Psychiatric Association (1980) made further strides towards incorporating the variability and complexity of the orgasmic dysfunction syndrome. Within this system, symptoms are categorized along five axes: 1) mental disorders, 2) personality and specific developmental disorders, 3) physical disorders, 4) severity of contributing stressors, and 5) clinical judgement of the highest level of adaptive functioning. Orgasmic disorder is defined in DSM III as "recurrent and persistent inhibition of female orgasm, manifested by delay in or absence of orgasm following normal excitement phase and adequate sexual activity". Orgasmic dysfunction can be manifested as either a disturbance in the subjective sense of pleasure or desire and/or disturbance in objective performance (physiological changes). The dysfunction may be either life-long or acquired, generalized or situational, and total or partial.

Although DSM III represents a comprehensive system for all psychological disorders, it does not include the full range of specific manifestations for sexual disorders in general, and female orgasmic dysfunction in particular. In addition, the system is structured in such a way that symptoms must be categorized in order of importance, whereas such a judgement cannot yet be made in the case of the orgasmic disorder syndrome.

A further refinement has been offered by Schover (1980). She bases her diagnostic system , which she terms "descriptive", on the complex nature of the human sexual response. According to Schover, female sexual responsiveness consists of three distinguishable phases: the sexual interest or desire phase, the arousal phase, and the orgasmic phase. Within each of these phases, she identifies three basic components: sensory, cognitive and affective. Historical and circumstantial factors as well as other descriptors are incorporated into the descriptive scheme. A partial presentation of her scheme, appropriate to the present study, may be seen in Table 2.

Table B

Schover's (1980) Multi-Axial Descriptive System for Female Orgasmic Dysfunction

Desire Phase	Arousal Phase	Orgasm Phase
Low sexual desire	Decreased subjective arousal	Anhedonic orgasm (G vs S)
Aversion to sex	Decreased physiological arousal	Inorgasmic (G vs S)
*(L vs N)	Decreased subjective and physiological arousal	Inorgasmic except for masturbation (S)
*(G vs S)	(L vs N)	Inorgasmic except for partner manipulation (S)
*(P)	(G vs S)	Inorgasmic except for masturbation or partner manipulation (S)
	(P)	Infrequent coital orgasms
		Inorgasmic except for vibrator or mechanical stimulation (S)
		(L vs N)
		(P)

* Life-long vs Non Life-long
Global vs Situational
Presenting complaint.

When considering multi-axial classificatory or descriptive schemes such as that presented by Schover, it is readily apparent that, within a problem category, considerable individual variability is possible. This suggests that, even within a specific problem category, consideration should be given to the interaction between patient and problem characteristics, and to the investigation of predictor variables. Attention to these interactions would lead to more efficient and cost effective treatments. More specifically, it would yield answers to the question: "What type of patient will respond to a therapy which contains which therapy components when these components are administered in what type of format?"

Findings on Relation of Individual Differences and Therapy Variables to Therapeutic Outcome

A number of researchers, although not specifically investigating predictive or prognostic factors, nevertheless were able to draw some conclusions concerning this issue from their data. Several investigations have suggested that marital disharmony is related to poor treatment outcome for sexual dysfunction (Jehu, 1980; Leiblum & Rosen, 1979; Libman et al., 1980; Marks, 1981; Mathews et al., 1976). There has been some suggestion that age may be related to therapy outcome with nonorgasmic women (Schniedman & McGuire, 1976). Severity and duration of erectile problems in males has been associated with therapeutic success or failure (Lobitz & Baker, 1979). Occupational status and "restricted" versus "inhibited" lifestyles have also been implicated in the treatment outcome of sexually unresponsive women (Clement, 1980). Some studies have indicated that primary orgasmic dysfunction is more successfully treated than secondary (McGovern, Stewart-McMullen & LoPiccolo, 1978), however one study has suggested the opposite (Munjack,

Cristol, Goldstein, Phillips, Goldberg, Whipple, Staples & Kanno, 1976). There is some evidence that primary erectile dysfunction in males is less successfully treated than secondary (Hogan, 1978; Jehu, 1979; Kilmann, 1978; Kilmann & Auerbach, 1979). Two studies specifically explored predictor variables. One indicated that frequency of sexual activity, sexual repertoire, and a specific personality variable, "extraversion", were highly predictive of sexual satisfaction-dissatisfaction ratings in a sample of mixed sexual disorders(Libman et al., 1980). A second study demonstrated that total score on LoPiccolo and Steger's (1974) Sexual Interaction Inventory was the best predictor of treatment success in a sample of males with erectile disorder (Takefman & Brender, 1982). Barbach and Flaherty (1980) conducted an evaluation of the viability of group therapy in the treatment of situationally non-orgasmic women. (This was the first study in which the total sample consisted of secondary non-orgasmic women, and the treatment format consisted of the women without their partners). Although final evaluations were carried out on only a small proportion of the original sample (28 out of an initial 72), and results were difficult to assess statistically, their findings raised some interesting hypotheses as to predictor variables for successful therapy outcome, including completion of a difficult homework assignment, length of the sexual relationship and the nature of committment to the relationship, and presence or absence of non-sexual problems.

Present Investigation

The direct comparison of the effectiveness of three major formats of behavioral sex therapy has not yet been carried out in previous investigations. Therefore the first goal of the present study was to compare, directly,

standard couple, group and minimal contact bibliotherapy. Such a comparison is important on theoretical grounds and also in terms of cost effectiveness. For example, in terms of therapist hours involved, the three formats of therapy delivery range from relatively expensive (couple therapy) through moderate cost (group therapy) to inexpensive (minimal contact bibliotherapy).

Previous studies which have addressed the issue of therapy format have typically selected samples in which either a range of sexual disorders was represented, or the disorder selected was one already shown to be readily responsive to treatment (e.g., primary orgasmic dysfunction in women, or premature ejaculation in men). Such a design makes the evaluation of possible important interactions between problem and therapy format difficult. In addition, therapy formats which are effective for one form of sexual disorder may not be generalizable to other sexual problems. The present investigation employs a homogeneous sample with a relatively complex sex problem - secondary orgasmic dysfunction in women. Criteria for selection of secondary nonorgasmic women for the present sample were similar to those proposed by McGovern et al. (1978), which ensured a reasonably comprenhensive and homogeneous sample. This is an important factor in permitting results of this study to be compared with those of other investigations.

A second aim of this study was to examine the contribution of three components which frequently form part of a sex therapy program. The same therapy package was administered to all subjects in each of the three treatment conditions, and the multicomponent program included sexual education, self-exploration, masturbation training, communication training, sensate focus exercises and ban on intercourse. The duration of the program was 14 weeks. The sequencing of therapy components, and the use of self-monitoring

permitted evaluation of these components separately. The three specific components selected for investigation were: sensate focus I, sensate focus II exercises (non-genital and genital caressing respectively) and ban on intercourse.

A third goal was to develop prognostic indices for patient and problem characteristics associated with therapeutic success and failure in a cognitive-behavioral sex therapy program. This is an area which has minimal representation in the sex therapy literature, and is important for efficient and effective treatment.

The design of the present study incorporates a number of important elements (many of which were not part of the studies reviewed earlier). Experienced sex therapists administered the treatments. The same therapists participated in all three treatment conditions. Multiple measures of outcome were used. Two personality and marital adjustment measures were administered. Sexual behavior inventories included both measures of behavioral frequency as well as subjective satisfaction. Both intermittent questionnaire and daily behavioral self-monitoring data were obtained. Husbands, as well as wives were tested before, during and after therapy, and at a follow-up period three months after termination of therapy.

METHOD

Subjects

Twenty-three married couples with the problem of secondary orgasmic dysfunction in the wife served as subjects. Couples were recruited through referrals from family physicians and gynecologists and through publicity in newspapers. Potential subjects contacted the project secretary, who conducted a preliminary telephone screening: if judged appropriate, the couple was referred to one of the project therapists to verify that they fit the selection criteria listed below.

The definition of secondary orgasmic dysfunction proposed by McGovern, Stewart-McMullen and LoPiccolo (1978) was used. For inclusion in the study, women had to have experienced at least one orgasm through some mode of sexual stimulation but have been dissatisfied because of low frequency of orgasmic response, because of the type of sexual stimulation required for orgasm (e.g., orgasmic with oral stimulation only) or because of the stimulus conditions under which orgasm occurred (e.g., not orgasmic with intercourse). Only those women who experienced orgasms less than 25% of the time with any type of interpersonal stimulation during the last six months were included in the study.

Additional criteria to be met by subjects included: a) wife aged 20-45, b) wife had experienced orgasm, but currently in less than 25% of sexual encounters with her partner, c) duration of problem at least six months, d) currently married, duration of relationship minimum one year, e) educational level at least grade 9 and f) both partners agreeable to therapy. Subjects were excluded on the basis of : a) current physical illness, b) current or recent (within 1 year) psychotherapy, c) pregnancy or menopause,

d) severe marital discord, and e) severe sexual problem in partner. Couples who did not conform to the inclusion criteria were either treated in the Jewish General Hospital Sexual Dysfunction Service or were referred elsewhere, if necessary.

The 23 participating couples had been married between 1 and 20 years, with a mean duration of 10 years. Subjects ranged in age from 25 to 44; the mean was 33 years for wives and 34 years for husbands. Both male and female subjects had an average of 15 years of education. The mean combined income of couples was $36,000.

Measures

Questionnaire Measures

Subjects completed the questionnaires listed below on three occasions: pre-therapy (approximately one week prior to starting therapy), post-therapy (at the end of the 14 week program), and at follow-up (three months after the fourteenth week of treatment).

Eysenck Personality Inventory (EPI), form A. (Eysenck & Eysenck, 1968). This is a 57 item, true/false questionnaire which can be completed in about 15 minutes. The EPI measures two personality dimensions: Neuroticism-Stability and Extraversion-Introversion. The EPI also incorporates a Lie Scale which monitors the degree to which subjects respond in a socially desirable way. The validity of the EPI has been demonstrated to the extent that groups judged neurotic on the basis of psychiatric assessment scored higher on the Neuroticism measure of the EPI than normals. Similarly, subjects rated by independent judges on their "introverted" and "extraverted" behavior patterns obtained scores on the EPI consistent with these ratings. High test-retest reliability (.84 for Neuroticism, .82 for Extraversion) was also established on a sample of normal English subjects over a one year period (Eysenck & Eysenck, 1968).

The Jewish General Hospital (JGH) Sexual Behavior Questionnaire. This is an extensive self-report instrument consisting of questions and rating scales used routinely in the initial evaluation of all couples seeking help at the Sexual Dysfunction Service of the Jewish General Hospital in Montreal. This instrument assesses a wide range of sexual habits and experiences (e.g., nature of sexual repertoire, current frequency of sexual activities, level of sexual enjoyment, etc.). The items are presented in the form of 8 point rating scales (0-7). Test-retest reliability has been evaluated on several sections of the questionnaire. Time interval between testings was three months and correlations ranged from .70 to .90. Differences in questionnaire scores between couples seeking sex therapy and well-functioning couples have been observed, and changes in scores from pre to post-therapy were found to reflect improved functioning, consistent with clinical impression (Libman et al., 1980).

Sexual Interaction Inventory (SII). (LoPiccolo & Steger, 1974) Since the JGH Questionnaire has not yet been used in settings other than our own, the SII was included in this study as a further outcome measure. This instrument consists of a list of 17 heterosexual behaviors. For each behavior, couples answer six questions using a 6-point scale. The totals from each spouse are used to derive an 11 scale profile. The scales assess, for each spouse: a) Frequency Dissatisfaction (derived by totaling, across all 17 items, the differences between ratings of current frequency for each activity and the desired frequency for each activity. A high score indicates dissatisfaction with the range and/or frequency of sexual activities), b) Self-Acceptance (derived by totaling differences between ratings of current pleasure obtained from each activity and pleasure desired from each activity. A high score indicates dissatisfaction with the degree of pleasure currently obtained from sexual activity), c) Pleasure Mean (derived by summing ratings of pleasure

obtained from each activity and dividing by the number of sexual activities practised. A low score indicates low enjoyment of sexual activities) d) Perceptual Accuracy (derived by summing differences in partners' self-report of pleasure and spouses' ratings of their partner's pleasure in those sex acts practised by the couple. High scores indicate that the partners do not effectively communicate their sexual tastes and preferences), e) Mate Acceptance (derived by summing differences in the perception of partner's responsiveness and desired partner responsiveness. A high score indicates dissatisfaction with partner's perceived responsiveness) f) Total Disagreement (This scale is an overall summary scale for the couple and measures total disharmony and dissatisfaction in the sexual relationship. It is derived by totaling all of the raw difference scores of the other scales, excluding Pleasure Mean, for each spouse.). A high score indicates low harmony and high dissatisfaction in the sexual relationship). The test was found reliable on test-retest (two week interval) and manifested good internal consistency; all scales correlated with self-report of sexual satisfaction . It was demonstrated to be reactive to treatment and was able to discriminate sexually dysfunctional clients from non-clients (LoPiccolo & Steger, 1974).

The Locke-Wallace Marital Adjustment Scale (L-W). (Locke & Wallace, 1959). This self-report questionnaire is frequently used to assess the quality of marital functioning. Reliability of this test, computed by the split-half technique, yielded a value of .90 . Validity for the L-W was established on the basis of demonstration that it differentiated clearly those persons seeking marital therapy from individuals who were judged, by intimate friends, to be contented in their marriage (Locke & Wallace, 1959).

Azrin Marital Happiness Scale. (Azrin, Naster & Jones, 1973). This is a marital adjustment scale which provides information additional to that provided

by the L-W in a number of domains (e.g., household responsibilities, money management, etc.). It appears to be less susceptible to social desirability bias than the L-W. In the present study, the scoring has been modified so that responses are given on 8-point scale(0-7). Although in our own work we have found a high correlation between scores on the L-W and the Azrin (Libman et al., 1980), there is little published information concerning its rediability and validity.

Rosenberg Self-Esteem Scale. (Rosenberg, 1965) This is a scale designed to measure the self-acceptance aspect of self-esteem. It consists of ten items asnwered on a 4-point scale from "strongly agree" to "strongly disagree". It is a brief measure, but has been found to have fairly high reliability and validity. Test-retest correlation, with two-week interval, was .85. Self-esteem scores of normal volunteers correlated with independent measures of depressive affect and psychosomatic symptoms (Robinson & Shaver, 1973).

Self-Monitoring Measure

Daily Self-Monitoring Form. Inoorder to assess compliance with therapeutic assignments and to ascertain the frequency and quality of various sexual behaviors on a daily basis, female subjects and their spouses both completed the Daily Self-Monitoring Form each day throughout the 14 week therapy program. The forms were returned by subjects each week. On a daily basis, subjects a) indicated whether they engaged in a variety of sexual behaviors (see Table A), b) rated their enjoyment of each sexual experience on an 8-point scale (0-7); and c) specified whether they reached orgasm, and, if so, with which activity. Subjects also d) indicated what percentage of the bibliotherapy materials assigned for that week they had read, e) whether they had done any supplementary exercises (recommended in the readings), and f) rated their enjoyment of the assigned exercises on an 8-point scale (0-7).

Table C

Daily Self-Monitoring Form Items

Individual Sexual Activities	Affectional Display	Couple Sexual (Non-Coital) Activities	Intercourse
a) dreams	a) kissing and hugging	a) manual stimulation (genital) giving and receiving	a) male on top
b) fantasies	b) manual caressing (non-genital) giving and receiving	b) oral stimulation (genital) giving and receiving	b) female on top
c) masturbation	c) oral caressing (non-genital) giving and receiving	c) anal activities	c) side to side
d) reading erotica			d) rear entry
e) seeing erotica			

Noteworthy Aspects of Measures Used

The measurement of changes in the present study is noteworthy in several respects. a) Measures were carefully selected for their reliability and validity characteristics. In the case of a measure where insufficient reliability and validity information was available, a validated corresponding measure was included. b) Consistent with recommendations in the literature for the measurement of therapy outcome (Sotile & Kilmann,1977), multiple dependent measures were incorporated in the experimental design. The measures in this study assessed both narrow changes in specific sexual behaviors as well as broader changes in self-esteem, personality, and quality of marital interaction. c) The frequency of assessment provided information about the process of change over time. d) Information derived from record-keeping involved in most instances, the self-monitoring of readily observable and discrete behaviors (e.g., occurrence or non-occurrence of orgasm). Independent reports were obtained from husband and wife, permitting detection of discrepancy (for further discussion of the validity of self-monitoring, see Mahoney & Arnkoff, 1978).

Treatment Conditions

The first eight couples accepted into the study were assigned to the Group Therapy condition. All other couples were randomly assigned to one of the other two treatment conditions (Standard Couple Therapy or Minimal Contact Bibliotherapy). There were no significant differences among conditions on any of the demographic variables (i.e., age, duration of marriage, years of education, and income). Within each treatment condition, the therapy content and sequence of steps were identical.

Standard Couple Therapy

Individual couples were seen for one hour each week by a therapist (i.e., the two spouses and a therapist) over a 14 week period (n= 7 couples). Fifteen

sessions of therapy were provided to couples in this condition by one of three experienced female therapists.

Group Therapy

Orgasmically dysfunctional women met fifteen times in a group with two female therapists (two of the three therapists involved in Standard Couple Therapy) for 1 ½ hours each week over a 14 week period (n= 8 couples). The male partners of these women met with an experienced male therapist in a group, for 1 ½ hours, three times during the 14 week program. This male group met once in the beginning, once in the middle, and once at the end of the therapy program. These meetings took place in order to provide the men with information about the program, to enlist their support, and to obtain information at the end of therapy about the impact of the program. The all male group was designed to supplement usual group sex therapy practice. Its importance lies in the facilitation of therapeutic gains from the individual activities to couple interaction. It also permits effective monitoring and intervention, if necessary, in couple-related issues.

Minimal Contact Bibliotherapy

Couples met with one of the four therapists involved in the study twice: once at the beginning and once at the end of the 14 week therapy program. The same readings and self-instructional materials as those assigned in the other two treatment conditions were given to Minimal Contact Bibliotherapy couples at the first meeting. Record-keeping forms were mailed by subjects weekly (n= 8 couples).

Therapy Program

The therapy addressed four major areas over the 14 weeks.

Weeks 1-3: Self-Focus

This period included didactic information on sexual anatomy, the physiology of sexual response, and on sexual myths and misconceptions related to orgasmic

responding. Assigned exercises included relaxation, vaginal muscle control, body awareness and self-stimulation activities.

Weeks 4-9: Partner Communication and Guidance

This period included learning communication skills in initiating and refusing sexual relations, expressing sexual tastes and preferences, and acquiring techniques for reducing performance anxiety. During this time, intercourse was banned and the emphasis was first on non-genital then on genital caressing. "Sensate Focus I" non-genital caressing exercises were assigned during weeks 4-6 while "Sensate Focus II" genital caressing exercises were assigned during weeks 7-9.

Weeks 10-11: Enhancement of Sexual Repertoire and Skills

This period included specific techniques in self and interpersonal pleasuring to facilitate sexual enjoyment and expression, and learning to receive prolonged sexual stimulation without feeling obligated to reciprocate immediately. Intercourse was resumed during this period.

Weeks 12-14: Maintenance of New Skills

This period included a written evaluation of the gains produced by the program, individual problems encountered and effective measures to overcome these. This evaluation formed the basis of an individualized maintenance program for each couple.

Reading Assignments

Specific readings and behavioral tasks for both males and females were assigned for each of the 14 weeks. The assigned readings included three books: Becoming Orgasmic: A Sexual Growth Program for Women (Heiman, LoPiccolo & LoPiccolo, 1976), Male Sexuality: A Guide to Sexual Fullfillment (Zilbergeld, 1978) and Liberating Masturbation (Dodson, 1974), and selected chapters from: The Pleasure Bond (Masters & Johnson, 1970 b), Our Bodies, Ourselves (Boston Women's Health Book Collective, 1976), and Women's Orgasm: A Guide to Sexual Satisfaction (Graber & Kline-Graber, 1975).

Noteworthy Aspects of the Therapy Program

Although this therapy program was based on well established cognitive-behavioral techniques for dealing with secondary orgasmic dysfunction (e.g., Graber & Kline-Graber, 1975; Heiman et al., 1976), a number of innovations were introduced in its design. Subjects in all conditions received, at the outset of therapy, detailed weekly instructions and relevant information for the full 14 week program. This was in the form of 14 individual packets containing instructions for the program,reading materials, behavioral assignments and daily self-monitoring forms for the week. The materials used in the program constituted a more detailed and enriched program than that to be found in any single self-help manual. The program was designed so that the impact of various components of the therapy (i.e., "Sensate Focus I", "Sensate Focus II", banning of intercourse) on subjects' sexual activities, their enjoyment of these,and their orgasmic functioning could be evaluated using information from the Daily Self-Monitoring Form. (It should be noted that the ban on intercourse coincided with the Sensate Focus I and II periods, as it typically does in everyday clinical usage. Although this confound permitted the evaluation of the differential effects of Sensate Focus I and of Sensate Focus II exercises, since the ban on intercourse was a constant across the two Sensate Focus periods, the effects of Sensate Focus exercises and of banning intercourse could not be assessed independently of one another).

Procedure

All potential couples met with one of the project therapists for a screening interview. Couples who met all selection criteria were given the pre-test questionnaires to complete at home and were given an appointment for their first (orientation) session. At this orientation session, subjects returned completed questionnaires. All subjects were provided with a general introduction

to the program, an explanation of the merits of the specific treatment condition to which they had been assigned, and all written materials for the 14 week therapy program. Subjects were instructed in the proper use of the program materials and were given instructions to complete and return the record-keeping materials weekly.

For the Minimal Contact Bibliotherapy couples, the orientation session also included the presentation of Leslie LoPiccolo and Julia Heiman's 3 films: Becoming Orgasmic: A Sexual Growth Program for Women, Films I, II, and III. At the end of the session, these couples were given an appointment for a final summary meeting, 14 weeks later. The orientation session for all subjects in the Standard Couple Therapy and in the Minimal Contact Bibliotherapy conditions took place with one of the four therapists in the study. The same information was provided during the orientation session in the Group Therapy condition as well; however, the men and the women in this condition met in all male and all female groups. Subjects in the Standard Couple Therapy and in the Group Therapy conditions were shown LoPiccolo and Heiman's Film I during their second session, Film II during their fifth session and Film III during their tenth session.

At the end of the 14 week therapy program, a final summary meeting took place; again, each couple was seen individually in the Standard Couple Therapy and in the Minimal Contact Bibliotherapy conditions while all male and all female groups met in the Group Therapy Condition. At this time, post-therapy questionnaires were given to all subjects with instructions to return these one week later. A follow-up appointment in three months time was given all subjects. Follow-up questionnaires were mailed so that they would arrive one week prior to subjects' follow-up appointments. During the follow-up meeting, subjects' progress was discussed and follow-up questionnaires were returned. Couples who

wished to continue with therapy were offered sex therapy at the Jewish General Hospital or were given the option of being referred elsewhere. Only two subjects in this study availed themselves of this offer; one couple was seen for one additional session, while the other couple was seen twice. Both couples were seen by the therapist who had been assigned them for the study.

RESULTS

Overview

The findings of this study are organized in the following way. Sample Characteristics are presented first, in order to acquaint the reader with the nature of the sample. Effects of therapy and comparisons among treatment conditions are considered next. In the subsection entitled Therapeutic Effects, the effects of the therapy program on all subjects, both male and female, are presented for the pre-therapy, post-therapy, and three month follow-up periods. In the subsection entitled Comparisons Between Treatment Conditions, the three modalities of therapy delivery (Standard Couple Therapy, Group Therapy, Minimal Contact Bibliotherapy) are compared. The next section, Component Analysis, explores the effect of three frequently used components of sex therapy; ban on intercourse and Sensate Focus I and Sensate Focus II exercises, on sexual repertoire. The last section deals with prognostic factors, where an attempt is made to evaluate the patient characteristics which might predict sex therapy outcome.

In the present investigation, both questionnaires and daily self-observations on standardized forms were used. Questionnaires were administered prior to therapy, post-therapy, and at follow-up testing times. Self-monitoring data were collected on a daily basis during the 14 week therapy program. Male and female data were analyzed separately. There were three reasons for this: 1) this was primarily a study of female sexuality: male data were of secondary importance, 2) none of the hypotheses pertained to sex differences and 3) as cell frequencies are small, 3-way interactions would have been difficult to interpret.

Most analyses performed on the data used analysis of variance (ANOVA) and tests of simple effects; analyses followed a 3X3 factorial design. There were 3 levels of experimental condition: Standard Couple

Therapy (Couple), Group Therapy (Group) and Minimal Contact Bibliotherapy (Bibliotherapy) and 3 levels of testing times : Pre-Therapy (Pre), Post-Therapy (Post) and Follow-Up. In certain analyses, only some of these variables were used (e.g., in the analysis of follow-up scores, the experimental condition and post-therapy testing time variables were dropped due to missing data); in others, additional repeated measures variables were used (e.g., in the examination of the effects of "Sensate Focus" exercises, 4 repeated measures were used: Pre-Therapy (Pre), Sensate Focus I (SFI), Sensate Focus II (SFII) and Post-Therapy (Post)). Because of missing data and because of the mechanics of the data analysis process, sample sizes are different in different analyses; the sample size for each analysis is presented in the appropriate table.

In the attempt to find prognostic factors which predict the outcome of sex therapy, Pearson Product-moment correlation coefficients were calculated and stepwise regression as well as stepwise discriminant analyses were carried out.

Sample Characteristics

Equivalence of Groups

One way analysis of variance (ANOVA) comparisons of the means of all measures used in the study, for both males and for females, showed no significant differences between the three experimental groups. The pre-therapy means for all variables are presented in Tables 1 to 11.

Demographic Variables

Subjects were married for an average of 10 years and had sexual problems for 1 to 20 years (possible problem duration was limited to the duration of the relationship). The mean age for wives was 33 years; the mean for husbands was 34. Both males and females had an average of 15

years of education. Couples had an average combined income of $36,000.00. The demographic characteristics of each subject are presented in Table 1.

Sexual Repertoire of Females

The women in the sample masturbated an average of 2 times per month; those who masturbated were orgasmic with masturbation 72% of the time. The women received manual sexual stimulation an average of 4 times and they engaged in giving and receiving sexual stimulation simultaneously 3 times per month; they were orgasmic on 10% and 13% of these occasions, respectively. Females received oral stimulation an average of 2 times and engaged in giving and receiving oral stimulation stimultaneously once per month; they were orgasmic on 12% and 14% of these occasions, respectively. Male on top, female on top, side-to-side and rear entry intercourse positions were used an average of 4, 2, 1, and 1 times per month, respectively. Orgasmic rates for intercourse were: 5% for male on top, 3% for female on top, 2% for side-to-side, and 2% for rear entry intercourse. Because of the variability in scores, each woman's sexual repertoire is described in Table 2.

Therapeutic Effects and Comparisons

Between Treatment Conditions

Two-way (3 between-groups, 2 repeated measures) ANOVA comparisons [3 (Couple/Group/Biblio.) X 2 (Pre/Post)] were made on pre-therapy and post-therapy scores and 1-way (2 repeated measures) ANOVA comparisons (2 Pre/Follow-up) were made on pre-therapy and follow-up scores for both males and for females on the following measures: Locke Wallace Marital Adjustment Scale, Azrin Marital Happiness Scale, Jewish General Hospital Sexual Behavior Questionnaire (Communication, Affectional, Sexual Performance Related, and Sexual Repertoire variables) and the Sexual

Table 1

Demographic Characteristics of Sample

Subject No.	Duration of Relationship (years)	Duration of Problem[1] (years)	Females			Males		
			Age (years)	Education (years)	Income ($)	Age (years)	Education (years)	Income ($)
1	5	5	29	16	15,000	29	16	25,000
2	4	4	27	16	18,000	27	16	25,000
3	16	16	41	16	0	40	12	40,000
4	5	5	32	14	3,000	32	16	21,000
5	10	10	32	16	10,000	33	16	30,000
6	5	5	26	16	4,000	28	16	22,000
7	3	3	27	14	0	29	16	20,000
8	20	20	39	11	15,000	42	11	21,000
9	23	20	42	9	0	44	16	22,000
10	16	15	39	12	15,000	40	12	22,000
11	5	5	32	16	0	34	16	30,000
12	1	1	26	16	10,000	25	16	20,000
13	6	6	30	16	10,000	30	16	25,000
14	16	16	40	16	0	40	16	35,000
15	3	3	26	14	15,000	31	12	20,000
16	14	14	34	13	0	40	16	30,000
17	5	5	31	18	20,000	30	18	22,000
18	14	14	37	18	25,000	37	16	25,000
19	3	3	31	18	20,000	33	16	30,000
20	15	15	37	13	0	42	16	25,000
21	9	9	32	10	0	27	12	20,000
22	15	10	37	18	0	40	20	40,000
23	15	15	36	16	25,000	40	16	35,000
Mean:	10	10	33	15	9,000	34	15	27,000

[1] For the purpose of this study, maximum problem duration was limited to the duration of the relationshi

Table 2

Sexual Repertoire of Females Pre-Therapy

	Masturbation		Manual Stimulation				Oral Stimulation				Intercourse							
			(Receiving)		(Giving and Receiving)		(Receiving)		(Giving and Receiving)		(Male on Top)		(Female on Top)		(Side to Side)		(Rear Entry)	
Subject No.	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]	Frequency (per month)	Orgasm (%)[1]
1	4	86%	7	29%	7	29%	7	14%	7	14%	7	14%	7	0%	0	0%	5	0%
2	2	86%	5	0%	5	0%	4	0%	2	0%	5	0%	2	14%	1	0%	2	0%
3	4	100%	1	14%	0	0%	1	0%	0	0%	4	0%	1	0%	0	0%	1	14%
4	1	100%	3	0%	3	0%	0	0%	0	0%	4	14%	1	0%	2	0%	0	0%
5	1	0%	4	0%	2	0%	1	0%	0	0%	7	29%	4	29%	2	0%	3	14%
6	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%	0	0%	0	0%	0	0%
7	1	29%	7	0%	7	29%	6	43%	2	29%	6	0%	5	0%	5	0%	2	0%
8	0	0%	4	0%	0	0%	2	0%	0	0%	4	0%	1	0%	0	0%	0	0%
9	3	100%	5	0%	7	29%	1	0%	1	0%	7	0%	2	0%	2	0%	2	0%
10	0	0%	4	0%	1	0%	2	0%	1	0%	3	0%	1	0%	0	0%	0	0%
11	1	0%	1	0%	1	0%	0	0%	0	0%	2	0%	0	0%	0	0%	0	0%
12	1	71%	7	0%	7	0%	5	0%	0	0%	7	0%	1	0%	1	0%	0	0%
13	7	86%	7	0%	6	0%	2	0%	1	0%	7	0%	7	0%	0	0%	1	0%
14	2	43%	5	14%	4	0%	0	0%	0	0%	7	14%	1	0%	2	0%	0	0%
15	3	29%	2	14%	1	0%	2	14%	1	14%	2	0%	1	0%	0	0%	2	0%
16	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%	1	0%	1	0%	0	0%
17	1	86%	5	0%	1	0%	4	0%	1	0%	1	0%	6	0%	0	0%	3	0%
18	4	100%	5	0%	4	0%	2	0%	1	0%	1	0%	2	0%	0	0%	4	0%
19	1	100%	4	0%	1	0%	0	0%	0	0%	2	0%	1	0%	2	0%	0	0%
20	1	86%	2	14%	3	29%	1	0%	1	0%	2	43%	2	29%	1	29%	1	0%
21	3	86%	7	86%	3	86%	3	86%	2	71%	7	0%	2	0%	2	0%	3	0%
22	7	86%	7	0%	4	0%	3	29%	1	29%	3	0%	1	0%	0	0%	1	0%
23	6	100%	4	43%	1	43%	1	14%	1	14%	2	0%	1	0%	0	0%	2	0%
Mean	2	72%	4	10%	3	13%	2	12%	1	14%	4	5%	2	3%	1	2%	1	2%

1 Mean % Orgasm has been calculated only for those women who indicated that they engaged in the relevant activity.

Interaction Inventory.

As self-monitoring took place only during the 14 week therapy program, the pre-therapy scores used in the analyses are the means of scores for weeks 2, 3 and 4 of the program while post scores are based on the means of weeks 11, 12, and 13. Data from weeks 1 and 14 were not used in order to eliminate "start-up" and "wind-down" effects. Again, because subjects engaged in self-monitoring only during the treatment phase of the study, there are no follow-up scores on Daily Self-Monitoring Form items. Thus, self-monitoring scores were analyzed using only 2-way ANOVA comparisons [3 (Couple/Group/Biblio) X 2 (Pre/Post)] or [3(Couple/Group/Biblio.) X 4 (Pre/SFI/SFII/Post)] .

Therapeutic Effects

Marital variables. The results of ANOVA comparisons on the Locke Wallace Marital Adjustment Scale and Azrin Marital Happiness Scale scores and pre-therapy, post-therapy and follow-up means are presented in Table 3. The pre-test mean Locke Wallace Marital Adjustment Scale score was 106.31 for females and 104.35 for males. Mean Azrin Marital Happiness Scale scores ranged from 4.93 to 5.95 on all items except the one dealing with sexual happiness. Such scores, on both marital measures, are within the "average" range (Azrin, Naster, & Jones, 1973; Locke & Wallace, 1959). ANOVA comparisons show that both females' ($p<.01$) and males' ($p<.001$) Sexual Happiness scores improved pre to post-therapy; these improvements were maintained, both for females ($p<.001$) and for males ($p<.01$) at follow-up. Males' happiness scores on Personal Independence also improved at follow-up ($p<.01$), although there was no significant pre to post-therapy improvement. There were no significant changes on other marital variables.

Table 3

Marital Variables

Measures	Score Interpretation (Higher=)	Pre-Therapy - Post-Therapy Comparisons					Pre-Therapy - Follow-Up Comparisons[4]			
		n[1]	Pre $\bar{X}$	Post $\bar{X}$	Difference[2] p	Main Findings:[3] Between Groups	Difference[2] p	n[1]	Pre $\bar{X}$	Follow-up $\bar{X}$	Difference[2] p
Females											
Locke-Wallace	Better	13	106.31	116.92	n.s.	Couple=Group=Biblio.	n.s.	11	108.00	119.00	n.s.
Azrin Marital Happiness	Better										
Household		15	5.73	5.47	n.s.	Couple=Group=Biblio.	n.s.	11	6.00	6.67	n.s.
Social Activities		15	5.27	5.40	n.s.	Couple=Group=Biblio.	n.s.	11	5.91	5.91	n.s.
Money		15	5.87	5.47	n.s.	Couple=Group=Biblio.	n.s.	11	5.64	5.64	n.s.
Communication		15	4.93	5.20	n.s.	Couple=Group=Biblio.	n.s.	11	5.00	5.45	n.s.
Sex		15	2.93	5.13	.01	Couple=Group=Biblio.	n.s.	11	3.36	5.18	.01
Personal Independence		15	6.00	5.60	n.s.	Couple=Group=Biblio.	n.s.	11	6.27	6.09	n.s.
Partner Independence		22	5.95	5.59	n.s.	Couple=Group=Biblio.	n.s.	11	6.18	6.27	n.s.
General Happiness		22	5.41	5.68	n.s.	Couple=Group=Biblio.	n.s.	11	5.75	6.25	n.s.
Males											
Locke-Wallace	Better	17	104.35	110.12	n.s.	Couple=Group=Biblio.	n.s.	15	102.60	110.53	n.s.
Azrin Marital Happiness	Better										
Household		16	5.69	5.63	n.s.	Couple=Group=Biblio.	n.s.	11	5.64	7.73	n.s.
Social Activities		16	5.50	5.31	n.s.	Couple=Group=Biblio.	n.s.	15	5.20	5.33	n.s.
Money		16	5.56	5.69	n.s.	Couple=Group=Biblio.	n.s.	15	5.67	5.87	n.s.
Communication		16	5.50	5.25	n.s.	Couple=Group=Biblio.	n.s.	15	4.73	5.27	n.s.
Sex		16	3.06	5.12	.001	Couple=Group=Biblio.	n.s.	15	3.33	4.93	.01
Personal Independence		16	5.31	5.31	n.s.	Couple=Group=Biblio.	n.s.	15	5.47	6.33	.01
Partner Independence		21	5.52	5.52	n.s.	Couple=Group=Biblio.	n.s.	15	5.53	5.87	n.s.
General Happiness		21	5.62	5.86	n.s.	Couple=Group=Biblio.	n.s.	15	5.67	5.87	n.s.

[1] ns fluctuate due to missing data

[2] F test

[3] Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.= Minimal Contact Bibliotherapy.

[4] Comparisons between treatment conditions not carried out due to small ns.

Personality variables. ANOVA comparison results on the Rosenberg Self Esteem Scale and Eysenck Personality Inventory and pre-therapy, post-therapy and follow-up means are presented in Table 4. Although there was a tendency for males' Eysenck Personality Inventory Lie Scale scores to decrease at follow-up ($p<.10$), there were no significant differences found on these measures.

Sexual communication. Pre-therapy, post-therapy and follow-up means and the results of the analyses on the Jewish General Hospital (JGH) Sexual Behavior Questionnaire (Sexual Communication) variables are presented in Table 5. Results indicate that both females and males improved pre to post-therapy on: Understanding of Self (by Partner) ($p<.01$, $p<.001$ respectively), Knowledge of Partner's Sexual Preferences (by Self) ($p<.01$ for both males and females), Satisfaction with Sexual Communication ($p<.001$, $p<.10$, respectively) and Comfort with Sexual Communication ($p<.05$, $p<.01$, respectively). In addition, females improved pre to post-therapy on Knowledge of Own Sexual Preferences (by Partner) ($p<.001$). Improvement was maintained at follow-up by females on : Knowledge of Partner's Sexual Preferences (by Self) ($p<.05$), Knowledge of Own Sexual Preferences (by Self) ($p<.05$), Knowledge of Own Sexual Preferences (by Partner) ($p<.001$), and Satisfaction with Sexual Communication ($p<.001$). Improvement was maintained at follow-up **by females on: Knowledge of Partner's Sexual Preferences (by Self) ($p<.05$), Knowledge of Own Sexual Preferences (by Partner) ($p<.001$) and Satisfaction with Sexual Communication ($p<.001$). Improvement was maintained at follow-up** by males on: Knowledge of Partner's Sexual Preferences (by Self) ($p<.01$), Satisfaction with Sexual Communication ($p<.01$) and Comfort with Sexual Communication ($p<.05$). Although the pre to post therapy comparison on Understanding of Partner (by Self) was not significant, males improved on this variable at follow-up ($p<.01$). There were no other significant differences.

Affectional variables. The results of the analyses and the pre-

Table 4

Personality Variables

Measures	Score Interpretation (Higher=)	Pre-Therapy - Post-Therapy Comparisons						Pre-Therapy - Follow-Up Comparisons[4]			
		n[1]	Pre $\bar{X}$	Post $\bar{X}$	Difference[2] p	Main Findings:[3] Between Groups	Difference[2] p	n[1]	Pre $\bar{X}$	Follow-Up $\bar{X}$	Difference[2] p
Females											
Rosenberg Self Esteem	better	21	1.29	1.00	n.s.	Group=Couple=Biblio.	n.s.	14	2.75	1.50	n.s.
Eysenck Personality Inventory											
Extraversion	extraverted	13	10.38	10.76	n.s.	Group=Couple=Biblio.	n.s.	14	10.25	11.50	n.s.
Neuroticism	emotionality	19	11.11	10.37	n.s.	Group=Couple=Biblio.	n.s.	14	11.75	12.75	n.s.
Lie	faking good	19	2.84	2.68	n.s.	Group=Couple=Biblio.	n.s.	14	3.00	3.00	n.s.
Males											
Rosenberg Self Esteem	better	22	0.95	0.82	n.s.	Group=Couple=Biblio.	n.s.	15	0.73	0.80	n.s.
Eysenck Personality Inventory											
Extraversion	extraverted	17	10.35	10.06	n.s.	Group=Couple=Biblio.	n.s.	15	9.60	9.20	n.s.
Neuroticism	emotionality	20	8.55	8.40	n.s.	Group=Couple=Biblio.	n.s.	15	7.87	6.93	n.s.
Lie	faking good	20	3.45	3.30	n.s.	Group=Couple=Biblio.	n.s.	15	3.60	2.87	.10

[1] ns fluctuate due to missing data.

[2] F test.

[3] Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.

[4] Comparisons between treatment conditions not carried out due to small ns.

Table 5

Sexual Communication Variables: JGH Sexual Behavior Questionnaire

Measures	Score Interpretation (Higher=)	Pre-Therapy - Post-Therapy Comparisons						Pre-Therapy - Follow-Up Comparisons[4]			
		n[1]	Pre X	Post X	Difference[2] p	Main Findings[3] Between Groups	Difference[2] p	n[1]	Pre X	Follow-up X	Difference[2] p
Females											
Understanding of Self (by Partner)	better	19	4.11	5.11	.01	Couple=Group=Biblio.	n.s.	11	4.73	5.55	n.s.
Understanding of Partner (by Self)	better	19	5.16	5.68	n.s.	Couple=Group=Biblio.	n.s.	11	5.64	5.64	n.s.
Knowledge of Partner's Sexual Preferences (by Self)	better	19	4.58	5.37	.01	Couple=Group=Biblio.	n.s.	11	4.55	5.64	.05
Knowledge of Own Sexual Preferences (by Partner)	better	19	3.74	5.00	.001	Couple=Group>Biblio.	.10	11	3.73	5.00	.001
Satisfaction with Sexual Communication	better	19	3.32	5.16	.001	Couple=Group=Biblio.	n.s.	11	3.27	5.55	.001
Comfort with Sexual Communication	better	20	4.40	5.40	.05	Couple=Group=Biblio.	n.s.	9	5.33	5.78	n.s.
Males											
Understanding of Self (by Partner)	better	15	4.53	6.13	.001	Couple=Group>Biblio.	.05	15	5.87	6.00	n.s.
Understanding of Partner (by Self)	better	15	4.13	4.53	n.s.	Couple=Group=Biblio.	n.s.	15	4.13	5.60	.01
Knowledge of Partner's Sexual Preferences (by Self)	better	15	4.40	5.13	.01	Couple=Group=Biblio.	n.s.	15	4.53	5.53	.01
Knowledge of Own Sexual Preferences (by Partner)	better	15	4.60	4.93	n.s.	Couple=Group=Biblio.	n.s.	15	5.46	5.60	n.s.
Satisfaction with Sexual Communication	better	15	3.73	4.60	.10	Couple=Group=Biblio.	n.s.	15	3.40	5.20	.01
Comfort with Sexual Communication	better	22	4.45	5.50	.01	Couple=Group>Biblio.	.10	15	4.53	6.00	.05

1 n's fluctuate due to missing data.

2. F test.

3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.

4 Comparisons between treatment conditions not carried out due to small n's.

therapy, post-therapy and follow-up means of the JGH Questionnaire (Affectional Variables) and of the Affectional Display variables of the Daily Self-Monitoring Form are presented in Table 6. Results for females indicate improvement, pre-therapy to post-therapy on the following JGH Sexual Behavior Questionnaire Affectional items: Satisfaction with Affection ($p<.05$), Satisfaction with Partner's Consideration ($p<.05$), Frequency of Receiving Non-Genital Caressing ($p<.05$), Frequency ($p<.01$) and Enjoyment ($p<.05$) of Giving Non-Genital Caressing, and Frequency ($p<.10$) and Enjoyment ($p<.10$) of Giving and Receiving Non-Genital Caressing simultaneously; improvement at follow-up was maintained only on Frequency ($p<.10$) of Receiving Non-Genital Caressing. Although the pre to post-therapy comparison on Enjoyment of Receiving Non-Genital Caressing was not significant, females improved on this variable at follow-up ($p<.01$). Results for males indicate improvement pre to post-therapy on the following JGH Sexual Behavior Questionnaire Affection items: Affectional Contact ($p<.10$), Satisfaction with Partner's Consideration ($p<.05$), Frequency ($p<.10$) and Enjoyment ($p<.10$) of Receiving Non-Genital Caressing, and Frequency of Giving Non-Genital Caressing ($p<.05$): improvement at follow-up was maintained only on Frequency of Receiving ($p<.05$) and of Giving ($p<.05$) Non-Genital Caressing. Although no significant pre to post therapy change was found on males' Satisfaction with Affection, males were found to have improved on this variable at follow-up ($p<.10$). There were no other significant comparisons on JGH Questionnaire Affectional Variables. No significant differences were found on the two Daily Self-Monitoring Affectional Display variables for either males or females.

Sexual performance related variables. Pre-therapy, post-therapy and follow-up means and ANOVA results for JGH Questionnaire (Sexual Performance

Table 6

Affectional Variables: JGH Sexual Behavior Questionnaire and Daily Self-Monitoring Form

Measures[5]	Score Interpretation (Higher=)	Pre-Therapy - Post-Therapy Comparisons: n[1]	Pre X	Post X	Difference[2] p	Main Findings[3] Between Groups	Difference[2] p	Pre-Therapy - Follow-up Comparisons[4]: n[1]	Pre X	Follow-up X	Difference[2] p
Females											
Affectional Contact	more	20	5.60	5.80	n.s.	Couple>Group>Biblio.	.10	9	5.67	6.11	n.s.
Satisfaction-Affection	greater	20	4.50	5.35	.05	Couple>Group=Biblio.	.10	9	4.89	5.56	n.s.
Satisfaction with Partner's Consideration	greater	20	5.25	6.10	.05	Couple=Group=Biblio.	n.s.	9	5.11	5.67	n.s.
Non-Genital Caressing (Receiving)											
Frequency/month	higher	21	3.52	5.05	.05	Couple=Group=Biblio.	n.s.	14	3.93	5.14	.10
Enjoyment	greater	21	4.52	5.38	n.s.	Couple=Group=Biblio.	n.s.	14	4.43	6.29	.01
Non-Genital Caressing (Giving)											
Frequency/month	higher	22	2.91	4.59	.01	Couple=Group=Biblio.	n.s.	14	3.36	3.93	n.s.
Enjoyment	greater	22	3.68	4.82	.05	Couple=Group=Biblio.	n.s.	14	4.21	4.71	n.s.
Non-Genital Caressing (Giving & Receiving)											
Frequency/month	higher	22	3.09	4.14	.10	Couple=Group=Biblio.	n.s.	14	3.14	4.14	n.s.
Enjoyment	greater	22	4.23	5.09	.10	Couple>Group=Biblio.	.05	14	4.57	5.64	n.s.
Affectional Display											
Frequency/month	higher	21	123.63	130.70	n.s.	Couple=Group=Biblio.	n.s.				
Enjoyment	greater	21	4.04	4.19	n.s.	Group>Couple>Biblio.	.01				
Males											
Affectional Contact	more	21	5.05	5.71	.10	Couple=Group=Biblio.	n.s.	15	4.80	5.13	n.s.
Satisfaction-Affection	greater	21	5.10	5.76	n.s.	Couple=Group=Biblio.	n.s.	15	4.80	5.60	.10
Satisfaction with Partner's Consideration	greater	21	4.57	5.52	.05	Couple=Group=Biblio.	n.s.	15	4.73	5.20	n.s.
Non-Genital Caressing (Receiving)											
Frequency/month	higher	20	3.70	5.25	.10	Couple=Group=Biblio.	n.s.	13	3.31	4.77	.05
Enjoyment	greater	20	5.25	6.10	.10	Couple=Group=Biblio.	n.s.	13	5.77	6.15	n.s.
Non-Genital Caressing (Giving)											
Frequency/month	higher	21	4.48	5.81	.05	Couple=Group=Biblio.	n.s.	14	4.07	5.28	.05
Enjoyment	greater	21	5.24	5.38	n.s.	Couple=Group=Biblio.	n.s.	14	5.36	5.71	n.s.
Non-Genital Caressing (Giving & Receiving)											
Frequency/month	higher	22	4.18	5.09	n.s.	Couple=Group=Biblio.	n.s.	15	3.80	4.33	n.s.
Enjoyment	greater	22	5.59	5.64	n.s.	Couple=Group=Biblio.	n.s.	15	5.67	5.73	n.s.
Affectional Display											
Frequency/month	higher	22	130.93	148.89	n.s.	Couple=Group=Biblio.	n.s.				
Enjoyment	greater	22	3.88	4.04	n.s.	Couple=Group=Biblio.	n.s.				

1 ns fluctuate due to missing data.
2 F test.
3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.
4 Comparisons between treatment conditions not carried out due to small ns.
5 All items except the last one (for females, for males) are from the JGH Questionnaire. The last item is based on self-monitoring.

Related) variables are presented in Table 7. Results indicate that females improved pre to post-therapy on : Satisfaction with Duration of Encounters ($p<.01$) and % of Sex for Partner Only ($p<.01$); these improvements were maintained at follow-up ($p<.05$, $p<.001$, respectively). Males improved pre to post-therapy on Satisfaction with Duration of Encounters ($p<.001$) and Difficulty Initiating ($p<.05$); these improvements were also maintained at follow-up ($p<.05$, $p<.10$, respectively). There were no other significant comparisons on this measure.

Sexual Interaction Inventory. Pre-therapy, post-therapy and follow-up mean scores and the results of the analyses on the Sexual Interaction Inventory are presented in Table 8. Females were found to improve from pre-therapy to post-therapy on: Frequency Dissatisfaction ($p<.001$), Self Acceptance ($p<.05$) and Mate Acceptance ($p<.001$). Improvement was maintained at follow-up on: Frequency Dissatisfaction ($p<.001$) and Mate Acceptance ($p<.10$). Males improved pre-therapy to post-therapy on: Frequency Dissatisfaction ($p<.001$), Self Acceptance ($p<.10$), Perceptual Accuracy ($p<.10$), and Mate Acceptance ($p<.05$). Improvement was maintained at follow-up on: Frequency Dissatisfaction ($p<.05$), and Mate Acceptance ($p<.05$). The only additional significant comparison on this measure was improvement pre-therapy to post-therapy on the couple summary Total Disagreement Scale ($p<.001$); this improvement was also maintained at follow-up ($p<.01$).

The pre-therapy mean ($M=$ 119.53) Total Disagreement Scale score of the present sample resembles that of LoPiccolo and Steger's (1974) pre-therapy "sexually dysfunctional" group, while the post-therapy ($M=$ 76.82) and follow-up ($M=$ 67.70) scores of the present sample resemble that of their post-therapy group.

Sexual Repertoire (JGH Sexual Behavior Questionnaire items). Results of ANOVA comparisons and pre-therapy, post-therapy and follow-up means of females' and males' JGH Questionnaire (Sexual Repertoire Variables) are presented in Tables 9 and 10, respectively. Females improved pre to post-therapy and maintained gains at follow-up on the following items: Frequency

Table 7

Sexual Performance Related Variables: JGH Sexual Behavior Questionnaire

Measures	Score Interpretation (Higher=)	Pre-Therapy - Post-Therapy Comparisons: n[1]	Pre X	Post X	Difference[2] p	Main Findings[3] Between Groups	Difference[2] p	Pre-Therapy - Follow-up Comparisons[4]: n[1]	Pre X	Follow-up X	Difference[2] p
Females											
Satisfaction with Duration of Encounters	greater	19	3.74	5.16	.01	Couple=Group=Biblio.	n.s.	8	3.88	5.25	.05
Frequency of Initiation (by Self)	higher	19	2.68	3.32	n.s.	Couple=Group=Biblio.	n.s.	11	2.27	2.91	n.s.
Difficulty Initiating	difficult	20	3.35	2.35	n.s.	Couple=Group=Biblio.	n.s.	9	3.11	1.78	n.s.
% of Sex for Partner Only	greater	20	50%	26%	.01	Couple=Group=Biblio.	n.s.	9	49%	26%	.001
Males											
Satisfaction with Duration of Encounters	greater	15	3.73	4.80	.001	Couple=Group>Biblio.	.05	11	3.36	4.91	.05
Frequency of Initiation (by Self)	higher	15	4.87	4.93	n.s.	Couple=Group=Biblio.	n.s.	15	5.13	4.73	n.s.
Difficulty Initiating	difficult	22	3.36	2.32	.05	Couple=Group=Biblio.	n.s.	15	3.13	1.87	.10
% of Sex for Partner Only	greater	22	17%	23%	n.s.	Couple=Group=Biblio.	n.s.	15	14%	18%	n.s.

1 ns fluctuate due to missing data.
2 F test.
3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.
4 Comparisons between treatment conditions not carried out due to small ns.

Table 8

Sexual Interaction Inventory Scales

Measures	Score Interpretation (Higher=)	Pre-Therapy - Post-Therapy Comparisons						Pre-Therapy - Follow-Up Comparisons			
		n[1]	Pre X	Post X	Difference[2] p	Main Findings;[3] Between Groups	Difference[2] p	n[1]	Pre X	Follow-up X	Difference[2] p
Females											
Frequency Dissatisfaction	dissatisfied	17	19.94	11.94	.001	Couple=Group=Biblio.	n.s.	8	21.88	12.00	.001
Self Acceptance	low acceptance	17	14.41	8.29	.05	Couple=Group=Biblio.	n.s.	8	13.38	10.13	n.s.
Pleasure Mean	high pleasure	17	4.63	5.01	n.s.	Couple=Group=Biblio.	n.s.	8	4.91	5.07	n.s.
Perceptual Accuracy	low accuracy	17	10.76	9.29	n.s.	Couple=Group=Biblio.	n.s.	7	10.86	5.29	n.s.
Mate Acceptance	mate unresponsive	17	14.06	6.26	.01	Couple=Group=Biblio.	n.s.	7	13.57	7.71	.10
Total Disagreement	low harmony	17	119.59	76.82	.001	Group=Biblio.>Couple	.05	10	114.10	67.70	.01
Males											
Frequency Dissatisfaction	dissatisfied	17	21.53	13.71	.001	Biblio.>Couple=Group	.05	12	20.25	12.08	.05
Self Acceptance	low acceptance	17	7.00	4.41	.10	Biblio=Group>Couple	.10	12	5.92	4.67	n.s.
Pleasure Mean	high pleasure	17	5.10	5.29	n.s.	Couple>Group>Biblio.	.05	12	5.17	5.28	n.s.
Perceptual Accuracy	low accuracy	17	13.41	11.71	.10	Biblio.>Group>Couple	.10	10	14.50	11.40	n.s.
Mate Acceptance	mate unresponsive	17	10.76	9.29	.05	Couple=Group=Biblio.	n.s.	10	14.50	8.90	.05
Total Disagreement	low harmony	17	119.59	76.82	.001	Group=Biblio.>Couple	.05	10	114.10	67.70	.01

1 n's fluctuate due to missing data.

2 F test

3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.

4 Comparisons between treatment conditions not carried out due to small n's.

Table

Females: Sexual Repertoire Variables (JGH Sexual Behavior Questionnaire)

Measures[5]	Score Interpretation (Higher=)	Pre-Therapy - Post-Therapy Comparisons						Pre-Therapy - Follow-Up Comparisons				
		n[1]	Pre $\bar{X}$	Post $\bar{X}$	Difference[2] p	Main Findings:[3] Between Groups	Difference[2] p	n[1]	Pre $\bar{X}$	Follow-up $\bar{X}$	Difference[2] p	
Individual Sexual Activities												
Masturbation												
Frequency/month	higher	19	2.11	3.26	.01	Couple =Group=Biblio.	n.s.	11	2.09	2.45	n.s.	
Enjoyment	greater	19	2.32	1.74	n.s.	Couple =Group=Biblio.	n.s.	11	2.09	2.18	n.s.	
% Orgasm	higher	19	55%	65%	n.s.	Couple =Group=Biblio.	n.s.	11	56%	77%	.05	
Couple Sexual (Non-Coital) Activities												
Manual Stimulation (Receiving)												
Frequency/month	higher	20	4.20	5.85	.01	Couple =Group=Biblio.	n.s.	13	4.31	5.31	.05	
Enjoyment	greater	20	4.45	5.55	.05	Couple =Group=Biblio.	n.s.	13	5.38	5.92	n.s.	
% Orgasm	higher	20	9%	33%	.001	Couple =Biblio.> Group	.05	13	8%	27%	.10	
Manual Stimulation (Giving and Receiving)												
Frequency/month	higher	21	2.95	3.90	n.s.	Couple =Group=Biblio.	n.s.	13	2.77	3.00	n.s.	
Enjoyment	greater	21	3.67	4.48	.10	Couple > Group=Biblio.	.05	13	3.92	4.69	n.s.	
% Orgasm	higher	21	10%	24%	.01	Couple > Biblio.>Group	.01	13	5%	22%	.10	
Oral Stimulation (Receiving)												
Frequency/month	higher	20	2.25	3.25	.05	Couple =Group=Biblio.	n.s.	13	2.38	2.54	n.s.	
Enjoyment	greater	20	4.20	4.70	n.s.	Couple =Group=Biblio.	n.s.	13	4.54	5.46	n.s.	
% Orgasm	higher	20	9%	23%	.05	Couple =Group=Biblio.	n.s.	13	4%	14%	n.s.	
Oral Stimulation (Giving and Receiving)												
Frequency/month	higher	20	1.00	1.80	.05	Couple =Group=Biblio.	n.s.	12	1.08	1.92	n.s.	
Enjoyment	greater	20	2.20	3.55	.05	Couple =Group=Biblio.	n.s.	12	2.00	3.75	.01	
% Orgasm	higher	20	8%	15%	n.s.	Couple =Group=Biblio.	n.s.	12	3%	13%	n.s.	
Intercourse												
Male on Top												
Frequency/month	higher	22	3.86	3.81	n.s.	Couple =Group=Biblio.	n.s.	14	3.93	3.79	n.s.	
Enjoyment	greater	22	4.05	4.82	.10	Couple =Group=Biblio.	n.s.	14	4.29	5.21	.10	
% Orgasm	higher	22	5%	8%	n.s.	Couple =Group=Biblio.	n.s.	14	5%	8%	n.s.	
Female on Top												
Frequency/month	higher	21	1.95	2.38	n.s.	Couple =Group=Biblio.	n.s.	14	2.14	1.93	n.s.	
Enjoyment	greater	21	3.62	4.57	.05	Couple =Group=Biblio.	n.s.	14	4.00	4.71	n.s.	
% Orgasm	higher	21	3%	10%	.10	Couple =Group=Biblio.	n.s.	14	3%	6%	n.s.	

1 ns fluctuate due to missing data.

2 F test.

3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.

4 Comparisons between treatment conditions not carried out due to small ns.

5 Means for Enjoyment and % Orgasm are artificially low due to having included 0 as the score when S's had not engaged in the activity. Adjusted scores appear in Table 2.

Table 10

Males: Sexual Repertoire Variables (JGH Sexual Behavior Questionnaire)

Measures[5]	Scoring (Higher=)	Pre-Therapy - Post-Therapy Comparisons: n[1]	Pre X	Post X	Difference[2] p	Main Findings[3] Between Groups	Difference[2] p	Pre-Therapy - Follow-Up Comparisons[4]: n[1]	Pre X	Follow-Up X	Difference[2] p
Individual Sexual Activities											
Masturbation											
Frequency/month	higher	20	3.30	2.70	n.s.	Couple=Group=Biblio.	n.s.	13	3.32	2.75	n.s.
Enjoyment	greater	20	4.20	3.75	n.s.	Couple=Group=Biblio.	n.s.	13	4.27	3.81	n.s.
% Orgasm	higher	20	64%	60%	n.s.	Couple=Group=Biblio.	n.s.	13	63%	62%	n.s.
Couple Sexual (Non-Coital) Activities											
Manual Stimulation (Receiving)											
Frequency/month	higher	21	2.95	4.95	.001	Couple=Group>Biblio.	.05	15	3.40	4.33	.05
Enjoyment	greater	21	6.10	6.00	n.s.	Couple=Group=Biblio.	n.s.	15	6.13	6.00	n.s.
% Orgasm	higher	21	32%	39%	n.s.	Couple=Group=Biblio.	n.s.	15	36%	28%	n.s.
Manual Stimulation (Giving and Receiving)											
Frequency/month	higher	21	2.71	4.42	.01	Group > Couple=Biblio.	.05	15	3.00	3.47	n.s.
Enjoyment	greater	21	5.71	6.19	n.s.	Couple=Group=Biblio.	n.s.	15	5.60	5.80	n.s.
% Orgasm	higher	21	29%	31%	n.s.	Couple=Group=Biblio.	n.s.	15	26%	27%	n.s.
Oral Stimulation (Receiving)											
Frequency/month	higher	21	1.71	3.19	.01	Couple=Group=Biblio.	n.s.	13	1.92	2.77	n.s.
Enjoyment	greater	21	5.05	5.33	n.s.	Couple>Group=Biblio.	.05	13	5.46	6.15	n.s.
% Orgasm	higher	21	25%	23%	n.s.	Couple=Group=Biblio.	n.s.	13	27%	21%	n.s.
Oral Stimulation (Giving and Receiving)											
Frequency/month	higher	21	1.14	1.57	n.s.	Couple=Group=Biblio.	n.s.	14	1.14	1.36	n.s.
Enjoyment	greater	21	4.67	4.05	n.s.	Couple=Group=Biblio.	n.s.	14	4.79	5.43	n.s.
% Orgasm	higher	21	24%	24%	n.s.	Couple=Group=Biblio.	n.s.	14	24%	15%	n.s.
Intercourse											
Male on Top											
Frequency/month	higher	22	4.36	4.50	n.s.	Couple=Group=Biblio.	n.s.	15	4.60	3.93	n.s.
Enjoyment	greater	22	5.90	6.04	n.s.	Couple=Group=Biblio.	n.s.	15	6.20	6.33	n.s.
% Orgasm	higher	22	82%	80%	n.s.	Couple=Group=Biblio.	n.s.	15	82%	78%	n.s.
Female on Top											
Frequency/month	higher	22	1.82	2.77	.05	Couple=Group=Biblio.	n.s.	15	2.00	1.73	n.s.
Enjoyment	greater	22	5.23	5.50	n.s.	Couple=Group=Biblio.	n.s.	15	5.20	6.27	n.s.
% Orgasm	higher	22	64%	67%	n.s.	Couple=Group=Biblio.	n.s.	15	64%	60%	n.s.

1 ns fluctuate due to missing data.
2 F test.
3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy
4 Comparisons between treatment conditions not carried out due to small ns.
5 Means for Enjoyment and % Orgasm are artificially low due to having included 0 as the score when S's have not engaged in the activity.

of ($p<.01$, $p<.05$, respectively) and % Orgasm with ($p<.001$, $p<.10$, respectively) Receiving Manual Stimulation, % Orgasm with Giving and Receiving Manual Stimulation simultaneously ($p<.01$, $p<.10$, respectively), Enjoyment of Giving and Receiving Oral Stimulation Simultaneously ($p<.05$, $p<.01$, respectively), and Enjoyment of Male on Top Intercourse ($p<.10$ for both comparisons). Although these gains were not maintained at follow-up, it was found that females improved pre to post-therapy on: Frequency of Masturbation ($p<.01$), Enjoyment of Receiving ($p<.05$) and of Giving and Receiving Manual Stimulation simultaneously($p<.10$), Frequency of ($p<.05$) and % Orgasm with ($p<.05$) Receiving Oral Stimulation, Frequency of Giving and Receiving Oral Stimulation simultaneously ($p<.05$), and Enjoyment of ($p<.05$) and % Orgasm ($p<.10$) with Female on Top Intercourse. Although no significant pre-post changes were found on this variable, females were found to improve at follow-up on % Orgasm with Masturbation ($p<.05$). As expected, males changed on fewer measures. Males improved pre to post-therapy ($p<.001$) and maintained gains at follow-up ($p<.05$) on Frequency of Receiving Manual Stimulation. Although not maintained at follow-up, males improved pre to post-therapy on: Frequency of Giving and Receiving Manual Stimulation simultaneously ($p<.01$), of Receiving Oral Stimulation ($p<.01$) and of Female on Top Intercourse ($p<.05$). No other significant differences were found on this measure.

Sexual repertoire (self-monitoring). Pre and post-therapy means and results of the analyses for these variables are presented in Table 11. Results indicate that while females engaged in more Frequent Individual Sexual Activities pre-therapy than post-therapy ($p<.05$) (it should be noted that such activities were prescribed by the therapy program during the pre-therapy period), they improved pre to post-therapy on Enjoyment of Individual Sexual Activities ($p<.05$) of Couple Sexual (Non-Coital)

Table 11

Sexual Repertoire Variables: Self-Monitoring

Measures[4]	Score Interpretation (Higher=)	n[1]	Pre-Therapy - Post Therapy Comparisons: Pre X	Post X	Difference[2] p	Main Findings:[3] Between Groups	Difference[2] p
Females							
Individual Sexual Activities							
Frequency/week	higher	21	5.07	2.49	.05	Couple=Group=Biblio.	n.s.
Enjoyment	greater	21	4.23	4.96	.05	Couple=Group=Biblio.	n.s.
% Orgasm	higher	21	80%	87%	n.s.	Couple=Group=Biblio.	n.s.
Couple Sexual (Non Coital) Activities							
Frequency/week	higher	21	5.36	6.02	n.s.	Couple=Group=Biblio.	n.s.
Enjoyment	greater	21	4.00	4.53	.05	Couple=Group>Biblio.	.05
% Orgasm	higher	21	21%	33%	n.s.	Couple>Group>Biblio.	.001
Intercourse							
Frequency/week	higher	21	1.58	1.44	n.s.	Couple=Group=Biblio.	n.s.
Enjoyment	greater	21	3.96	4.39	.05	Couple=Group=Biblio.	n.s.
% Orgasm	higher	21	14%	25%	n.s.	Couple=Group=Biblio.	n.s.
Males							
Individual Sexual Activities							
Frequency/week	higher	22	2.11	2.08	n.s.	Couple=Group=Biblio.	n.s.
Enjoyment	greater	22	3.96	3.93	n.s.	Couple=Group=Biblio.	n.s.
% Orgasm	higher	22	83%	67%	n.s.	Couple=Group=Biblio.	n.s.
Couple Sexual (Non Coital) Activities							
Frequency	higher	22	5.67	6.89	n.s.	Couple=Group=Biblio.	n.s.
Enjoyment	greater	22	4.08	4.64	.05	Group>Couple>Biblio.	.10
% Orgasm	higher	22	24%	44%	n.s.	Couple=Group=Biblio.	n.s.
Intercourse							
Frequency/week	higher	22	1.66	1.58	n.s.	Couple=Group=Biblio.	n.s.
Enjoyment	greater	22	4.62	4.68	n.s.	Couple>Group=Biblio.	.05
% Orgasm	higher	22	100%	100%	n.s.	Couple=Group=Biblio.	n.s.

1 *ns* fluctuate due to missing data.

2 *F* test.

3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.

4 Means for Enjoyment and % Orgasm are artificially low due to having included 0 as the score when *S*'s have not engaged in the activity.

Activities ($p<.05$) and of Intercourse ($p<.05$). Males also improved on Enjoyment of Couple Sexual (Non-Coital) Activities ($p<.05$). No other significant differences were found.

Comparisons Between Treatment Conditions

Marital and personality variables. No significant differences between experimental groups were found on any of the marital or personality measures (i.e., Locke Wallace Marital Adjustment Scale, Azrin Marital Happiness Scale, Rosenberg Self Esteem Scale, and Eysenck Personality Inventory. See Tables 3 and 4 for means.

Sexual communication. The results of the analyses of the JGH Questionnaire (Sexual Communication) items, presented in Table 5, show only three significant comparisons: males in the Couple and in the Group therapy conditions improved more pre to post-therapy on Understanding of Self (by Partner) ($p<.05$) and on Comfort with Sexual Communication ($p<.10$) than did subjects in the Bibliotherapy condition, and females in the Couple and in the Group therapy conditions improved significantly more pre to post-therapy than did females in the Bibliotherapy condition ($p<.10$) on Knowledge of Own Sexual Preferences (by Partner).

Affectional variables. The results of the analyses of the JGH Questionnaire (Affectional Variables) items are presented in Table 6. Results show that on Affectional Contact, females in the Couple therapy condition improved more pre to post-therapy than did females in the Group therapy condition, who, in turn, improved more than did females in the Bibliotherapy condition ($p<.10$). Females in the Couple therapy condition improved more pre to post-therapy on Affection-Satisfaction and on Enjoyment of Giving and Receiving Non-Genital Caressing simultaneously than did females in either the Group therapy or in the Bibliotherapy conditions ($p<.10$, $p<.05$,

respectively). There were no other significant comparisons, for either males or for females, on the JGH Questionnaire (Affectional Variables) items. On the Daily Self-Monitoring Form Affectional Display items, the only significant difference among groups was on Enjoyment of Affectional Display: females in the Group therapy condition improved more pre to post-therapy than did females in the Couple therapy condition, who, in turn, improved more than did females in the Bibliotherapy condition ($p<.01$).

Sexual performance related variables. The results of the analyses on JGH Questionnaire (Sexual Performance Related Variables), presented in Table 7, show that the only significant difference between experimental conditions was on Satisfaction with Duration of Encounters: males in the Couple and in the Group therapy conditions improved significantly more pre to post-therapy than did males in the Bibliotherapy condition ($p<.05$).

Sexual Interaction Inventory. Table 8 presents the results of the analyses on the Sexual Interaction Inventory. ANOVA comparisons show that males in the Couple therapy condition improved more pre to post-therapy than did males in the Group therapy condition, who, in turn, improved more than males in the Bibliotherapy condition on: the Pleasure Mean ($p<.05$) and on the Perceptual Accuracy ($p<.10$) scales. Males in the Couple therapy condition improved more pre to post therapy than males in either the Group therapy or in the Bibliotherapy conditions on Self Acceptance ($p<.10$), and males in the Couple and in the Group therapy conditions improved more pre to post therapy on Frequency Dissatisfaction than did males in the Bibliotherapy condition ($p<.05$). The only other significant comparison was on the couple summary Total Disagreement Scale: couples in the Couple therapy condition improved more pre to post-therapy on this measure than did couples in either the Group therapy or in the Bibliotherapy conditions ($p<.05$).

Sexual repertoire (JGH Sexual Behavior Questionnaire items). The results of the analyses on females' JGH Questionnaire (Sexual Repertoire Variables) are presented in Table 9; those of males are presented in Table 10. It was found that females in the Couple therapy condition improved more pre to post-therapy on % Orgasm with Giving and Receiving Manual Stimulation simultaneously than did females in the Bibliotherapy condition, who, in turn, improved more than females in the Group therapy condition ($p<.01$). In addition, females in the Couple therapy condition improved more pre to post-therapy on Enjoyment of Giving and Receiving Manual Stimulation simultaneously than did females in either the Group therapy or in the Bibliotherapy conditions ($p<.05$), while females in the Couple therapy and in the Bibliotherapy conditions improved more pre to post-therapy on % Orgasm with Receiving Manual Stimulation than did females in the Group therapy condition ($p<.05$). Males in the Group therapy condition improved more pre to post-therapy on Frequency of Giving and Receiving Manual Stimulation simultaneously than did males in either the Couple therapy or in the Bibliotherapy conditions ($p<.05$). Couple and Group therapy males were found to have improved more pre to post-therapy on Frequency of Receiving Manual Stimulation ($p<.05$) than did Bibliotherapy males ($p<.05$) and Couple therapy males improved more on Enjoyment of Receiving Oral Stimulation than did Group therapy or Bibliotherapy males ($p<.05$). There were no other significant findings on this measure.

Sexual repertoire (self monitoring). Table 11 presents the results of the analyses on Sexual Repertoire variables, as measured by self monitoring. Results show that females in the Couple therapy condition improved significantly more pre to post-therapy on % Orgasm with Couple Sexual (Non-Coital) Activities than did females in the Group therapy condition, who, in turn, improved more than did females in the Bibliotherapy condition ($p<.001$).

Females in the Couple and Group therapy conditions were found to have improved more on Enjoyment of Couple Sexual (Non-Coital) Activities pre to post-therapy than did females in the Bibliotherapy condition ($p<.05$). For males, results show that those in the Group therapy condition improved more on Enjoyment of Couple Sexual (Non-Coital) Activities than did those in the Couple therapy condition, who, in turn, improved more than those in the Bibliotherapy condition ($p<.10$). The only other significant finding on the self-monitoring variables was that Couple therapy males improved more pre to post-therapy than Group therapy or Bibliotherapy males on Enjoyment of Intercourse ($p<.05$).

Component Analyses

In order to assess the impact of banning intercourse and of sensate focus exercises, one-way (4 repeated measures) ANOVA comparisons [4 (Pre/ Sensate Focus I/ Sensate Focus II/ Post)] were made on both males' and females' mean scores on the Daily Self Monitoring Form Sexual Repertoire variables. As there were few differences between experimental groups on these variables, group effects were not investigated. During weeks 4-9 of the therapy program, intercourse was banned. During weeks 4-6, "Sensate Focus I" non-genital caressing exercises were assigned, while during weeks 7-9 "Sensate Focus II" genital caressing exercises were assigned. In data analysis, the mean of scores for weeks 5 and 6 were used for the Sensate Focus I period while the mean of scores for weeks 7 and 8 were used for the Sensate Focus II period. As in other analyses performed on Daily Self Monitoring variables, the pre-therapy scores used in these analyses were based on the means of weeks 2, 3 and 4 while the post therapy scores were based on weeks 11, 12 and 13. Data from the first and last weeks of time intervals were not used in order to eliminate "start-up" and "wind-down" effects. The results of the analyses are presented in Table 12.

Table 12

Effects of Sensate Focus Exercises: Self-Monitoring

Measures [5]	Score Interpretation (Higher=)	n [1]	Pre-Therapy X	SFI [4] X	SFII [4] X	Post-Therapy X	Overall Difference [2] p	Main Findings [3]
Females								
Individual Sexual Activities								
Frequency/week	higher	21	5.07	3.14	2.64	2.49	.01	Pre>SFI=SFII=Post
Enjoyment	greater	21	4.23	4.68	4.43	4.96	.05	Post>Pre
% Orgasm	higher	21	80%	81%	81%	87%	n.s.	Pre=SFI=SFII=Post
Affectional Display								
Frequency/week	higher	21	28.84	29.14	29.95	31.12	n.s.	Pre=SFI=SFII=Post
Enjoyment	greater	21	4.04	4.10	4.06	4.19	n.s.	Pre=SFI=SFII=Post
% Orgasm	higher	21	20%	20%	0%	3%	n.s.	Pre=SFI=SFII=Post
Couple Sexual (Non-Coital) Activities								
Frequency/week	higher	21	5.36	3.69	5.67	6.02	.05	Pre=SFII=Post>SFI
Enjoyment	greater	21	4.00	4.62	4.57	4.53	.05	Post=SFI=SFII>Pre
% Orgasm	higher	21	21%	21%	31%	33%	n.s.	Pre=SFI=SFII=Post
Intercourse								
Frequency/week	higher	21	1.58	0.90	0.52	1.44	.001	Pre=Post>SFI=SFII
Enjoyment	greater	21	3.96	3.85	3.54	4.39	.01	Post>Pre=SFI=SFII
% Orgasm	higher	21	14%	7%	7%	25%	n.s.	Pre=SFI=SFII=Post
Males								
Individual Sexual Activities								
Frequency/week	higher	22	2.11	3.55	2.66	2.08	n.s.	Pre=SFI=SFII=Post
Enjoyment	greater	22	3.96	3.85	4.12	3.93	n.s.	Pre=SFI=SFII=Post
% Orgasm	higher	22	83%	100%	100%	67%	n.s.	Pre=SFI=SFII=Post
Affectional Display								
Frequency/week	higher	22	30.54	31.32	33.08	34.73	n.s.	Pre=SFI=SFII=Post
Enjoyment	greater	22	3.88	3.90	4.00	4.04	n.s.	Pre=SFI=SFII=Post
% Orgasm	higher	22	5%	9%	0%	2%	n.s.	Pre=SFI=SFII=Post
Couple Sexual (Non-Coital) Activities								
Frequency/week	higher	22	5.67	4.20	4.95	6.89	n.s.	Pre=SFI=SFII=Post
Enjoyment	greater	22	4.08	4.25	4.44	4.64	.05	Post>Pre
% Orgasm	higher	22	24%	18%	61%	44%	.10	SFII>Pre=SFI
Intercourse								
Frequency/week	higher	22	1.66	1.09	0.64	1.58	.05	Pre=Post>SFII
Enjoyment	greater	22	4.62	4.08	3.76	4.68	.001	Pre=Post>SFI=SFII
% Orgasm	higher	22	100%	61%	55%	100%	.05	Pre=Post>SFI=SFII

1 n's fluctuate due to missing data.

2 F test.

3 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.

4 Sensate Focus I and Sensate Focus II.

5 Means for Enjoyment and % Orgasm are artificially low due to having included 0 as the score when S's have not engaged in the activity.

ANOVA test results show that while females engaged in more Frequent Individual Sexual Activities pre-therapy than during any other time period ($p<.01$), they enjoyed these activities more during the post-therapy period than they did during the pre-therapy period ($p<.05$). (It should be noted that individual sexual activities were prescribed in the therapy program during the pre-therapy period.) There were no significant differences for males on any of the Individual Sexual Activities variables.

Females also reported that they engaged in less Frequent Couple Sexual (Non-Coital) Activities during the Sensate Focus I period than they did during any of the other testing times ($p<.05$). Again, it should be noted that the therapy program during the Sensate Focus I period specifically prohibited such caressing. It is noteworthy that the analysis of male data on Frequency of Couple Sexual (Non-Coital) Activities did not show significant differences; this is probably due to the slightly different n's used in this comparison. Females enjoyed these activities significantly more during the post-therapy and the 2 Sensate Focus periods than they did during the pre-therapy period ($p<.05$): males enjoyed these activities more during the post-therapy than the pre-therapy period ($p<.05$). In addition, males experienced greater % Orgasm with Couple Sexual (Non-Coital) Activities during the Sensate Focus II period than they did during the pre-therapy and Sensate Focus I periods ($p<.10$).

Females engaged in Intercourse more frequently during the pre and post-therapy periods than they did during the 2 Sensate Focus periods ($p<.001$). (It should be noted that intercourse was forbidden by the therapy program during the 2 Sensate Focus periods.) Again, probably because of the different n's used in the comparisons the results of the analysis of male data are slightly different, and show that males engaged in Intercourse more frequently

during the pre and post-therapy periods than they did during the Sensate Focus II period ($p<.05$). While there was no difference in the % Orgasm with Intercourse for females, females did enjoy Intercourse more post-therapy than they did during any other testing times ($p<.01$). Males both enjoyed ($p<.001$) and experienced more frequent % Orgasm ($p<.05$) with Intercourse during the pre and post-therapy periods than they did during the 2 Sensate Focus periods.

There were no significant differences, either for males or for females, on any of the Affectional Display variables.

Prognostic Factors

All clinicians would like to know which patients will profit from sex therapy and which patients may benefit from other types of treatment. In order to determine what factors predict success with sex therapy, the relation between therapy process and individual difference variables and outcome of sex therapy was investigated. In each treatment condition, compliance with the therapy program, a therapy process variable, was related to Enjoyment and % Orgasm for various sexual activities. In order to investigate the ability of individual differences variables to predict the outcome of sex therapy, both stepwise regression analyses and stepwise discriminant analyses were carried out. Two measures of the outcome of sex therapy were used: the summary Couple Total Disagreement Scale of the Sexual Interaction Inventory (a questionnaire measure) and the Success:Experience Ratio (a derived measure based on self-monitoring data). All questionnaire measures used in the study were entered as potential predictor variables in both types of analyses.

There are few clues in the literature concerning either process or individual differences variables which predict the outcome of sex therapy. Thus, as the analyses on prognostic factors in the present intestigation are

of a post hoc nature, caution should be used in interpreting the findings.

Compliance with Therapy Program

In order to find out how therapy condition affected compliance with the therapy program, 2-way (therapy condition/gender) between-groups [3 (Couple/Group/Biblio.) X (Male/Female)] ANOVA comparisons on % of Assigned Reading Done and on % Extra Exercises Done, were carried out. (All subjects were assigned the same reading materials. In the reading materials assigned, exercises additional to those prescribed in the program were recommended; the % Extra Exercises Done refer to these exercises.) The means and the results of these analyses are presented in Table 13. It was found that subjects (both males and females) in the Group therapy and in the Bibliotherapy conditions carried out more of the % Assigned Reading ($p<.05$) and engaged in more Additional Exercises ($p<.05$) than did subjects in the Couple therapy condition. There were no significant differences between males and females on either of these two measures.

In order to investigate the relationship between compliance with the therapy program and outcome of sex therapy, Pearson product-moment correlation coefficients were computed. % Assigned Reading Done as well as % Extra Exercises Done, by both males and by females in each therapy condition, were related to post-therapy Enjoyment and % Orgasm scores on all sexual repertoire variables. The results are presented in Table 14.

Results show that % Assigned Reading Done in the Bibliotherapy condition was positively related to % Orgasm with Individual Sexual Activities for females ($r= + .559$, $p<.10$) and to Enjoyment of Intercourse for males ($r= + .695$, $p<.05$). Surprisingly, in the Group therapy condition, % Assigned Reading Done was negatively related to both Enjoyment ($r= - .535$, $p<.10$) and to % Orgasm ($r= - .580$, $p<.10$) with Intercourse for males. None of the other correlations using % Assigned Reading Done reached significance.

Table 13

Compliance with Program

Variable	Condition: Couple n	Couple $\bar{X}$	Group n	Group $\bar{X}$	Biblio. n	Biblio. $\bar{X}$	Main Findings[1]	Difference[2] p
% Assigned Reading Done								
Males	7	18%	8	40%	8	22%		
Females	7	18%	8	32%	8	42%	Males = Females	n.s.
Couples	7	18%	8	36%	8	31%	Group=Biblio. > Couple	.05
% Extra Exercises Done								
Males	7	14%	8	22%	8	28%		
Females	7	5%	8	29%	8	26%	Males = Females	n.s.
Couples	7	10%	8	26%	8	27%	Group=Biblio. > Couple	.05

1 Comparisons between treatment conditions. Couple=Standard Couple Therapy, Group=Group Therapy, Biblio.=Minimal Contact Bibliotherapy.

2 *F* test.

Table 14

Relationship Between Compliance with Programme and Sexual Repertoire Variables Post-therapy

Pearson Product-Moment Correlation Coefficients	n	Individual Sexual Activities		Non-Genital Caressing	Couple Sexual (Non-Coital) Activities		Intercourse	
		Enjoyment	% Orgasm	Enjoyment	Enjoyment	% Orgasm	Enjoyment	% Orgasm
% Assigned Reading Done								
Couple								
Females	7	+ .162	+ .416	- .433	- .123	- .029	+ .431	+ .413
Males	7	+ .335	+ .113	+ .082	+ .453	- .185	+ .336	+ .030
Group								
Females	8	- .353	+ .054	- .136	- .103	- .292	+ .391	- .292
Males	8	- .189	- .114	+ .091	+ .031	+ .217	- .535†	- .580†
Biblio.								
Females	7	+ .002	+ .559†	- .008	- .414	- .297	+ .371	+ .240
Males	7	+ .124	- .263	- .041	+ .320	+ .051	+ .695*	+ .001
% Extra Exercises Done								
Couple								
Females	7	+ .283	+ .878**	- .308	- .288	+ .583†	+ .188	+ .782*
Males	7	+ .090	+ .767*	+ .262	+ .359	+ .061	+ .318	+ .000
Group								
Females	8	+ .424	+ .663*	+ .169	+ .730*	+ .264	+ .084	+ .264
Males	8	+ .357	+ .368	- .623*	+ .067	+ .796*	+ .337	- .339
Biblio.								
Females	7	+ .679*	+ .617†	- .254	+ .538	+ .281	- .164	+ .831**
Males	7	+ .228	+ .162	- .553†	- .094	- .198	+ .149	- .256

† $p < .10$

* $p < .05$

** $p < .01$

Significance levels of the correlations using % Extra Exercises Done show that this variable is positively related to: % Orgasm with Individual Sexual Activities (r= +.878, p<.01), with Couple Sexual (Non-Coital) Activities (r= +.583, p<.10) and with Intercourse (r= +.782, p<.05) for Couple therapy females and with % Orgasm with Individual Sexual Activities for Couple therapy males (r= +.767, p<.05). In the Group therapy condition, % Extra Exercises Done was positively related to % Orgasm with Individual Sexual activities (r= +.663, p<.05) and to Enjoyment of Couple Sexual (Non-Coital) Activities (r= +.730, p<.05) for females and with % Orgasm with Couple Sexual (Non-Coital) Activities for males (r= +.796, p<.01); surprisingly, % Extra Exercises Done was related negatively to Enjoyment of Non-Genital Caressing by Group therapy males (r= -.623, p<.05). In the Bibliotherapy condition, % Extra Exercises Done was related positively to Enjoyment of Individual Sexual Activities (r= +.679, p<.05) and to % Orgasm with Individual Sexual Activities (r= +.617, p<.10) and with Intercourse (r= +.831, p<.01) for females, and negatively with Enjoyment of Non-Genital Caressing by males (r= -.553, p<.10). Other correlations using % Extra Exercises Done did not reach significance.

Individual Differences Variables

Prediction of success in sex therapy: questionnaire measure. In order to determine what combination of variables best predict post-therapy scores on the Sexual Interaction Inventory summary Total Disagreement scale, a stepwise regression analysis was done using females' pre-therapy scores on all questionnaire measures employed in the study. The Total Disagreement Scale was selected because it has been found to be related to other measures of success with sex therapy (LoPiccolo & Steger, 1974) and because it is the only measure used in this study which reflects couple, rather than exclusively male or female responses. As there were few differences found between treatment

groups on the ANOVA comparisons described in previous sections, the treatment condition variable was not considered in this analysis. Table 15 shows that the two variables that best predicted post-therapy Sexual Interaction Inventory Total Disagreement scores, in order of weighted importance, were: females' pre-therapy ratings of % Orgasm with Partner in the Past and of Knowledge of Partner's Sexual Preferences (by Self) on the JGH Sexual Behavior Questionnaire [i.e., higher % Orgasm with Partner in the Past and lesser Knowledge Partner's Sexual Preferences (by Self) were related to lower (better) Total Disagreement Scale scores]. These two predictor variables accounted for 42% of the variance in Total Disagreement scores (F (2/20)= 7.25, $p<.01$).

A stepwise discriminant analysis was conducted to assess whether females' pre-therapy scores could distinguish between the 11 "successful" couples whose post-therapy Total Disagreement scale score was equal to or lesser than 77 (the mean for couples post-therapy) and the 12 "unsuccessful" couples whose post-therapy Total Disagreement scale score was greater than 77. The discriminating variables used were females' pre-therapy scores on all questionnaire measures employed in the study. Again, because there were few differences between treatment groups on the ANOVA comparisons described in previous sections, the treatment condition variable was not considered in this analysis. Since there were far more variables entered into the analysis than there were subjects, the stepwise discriminant analysis was programmed to select only the two best discriminating variables in order to make the findings meaningful. When predicted group membership was compared to actual group membership, it was found that 19 of the 23 couples (i.e., 83%) were correctly classified (see Table 16) on the basis of information from the two variables used [Wilks= .2910 (equivalent F(2/11)= 13.40), $p<.01$]. That is, the stepwise discriminant analysis demonstrated that females' pre-therapy scores

Table 15

Regression Analysis: Sexual Interaction Inventory Post-Therapy Total Disagreement Scale

Step Number	Variable Entered	BETA	R	R^2	F
1	% Orgasm with Partner (in the past)	.431*	.648	.420	7.251**
2	Knowledge of Partner's Sexual Preferences (by Self) (Pre-therapy)	-.405*			

* $p < .05$

** $p < .01$

Table 16

Comparison of Actual Group Membership with Predicted Group Membership: Sexual Interaction Inventory Post-Therapy Total Disagreement Scale

Actual Group[1]	n	Predicted Group	
		Successes	Failures
Successes	11	11	0
Failures	12	4	8

[1] Those whose Sexual Interaction Inventory Total Disagreement scores were $\leq$ 77 were considered Successes; those whose scores were $>$ 77 were considered Failures.

on two measures were able to predict, with 83% accuracy, those couples who succeeded or failed post-therapy. Table 17 presents the two measures that separated the two groups, in descending order of discriminating power; these were: females' pre-therapy Knowledge of Partner's Sexual Preferences (by Self) and Masturbation Frequency. Means for these predictor variables and for the predicted variable (Total Disagreement Scale) for the Success and Failure groups are presented in Table 18. In summary, the results of the discriminant analysis indicate that females who felt, pre-therapy, that they did not have a good knowledge of their partner's sexual preferences and who masturbated infrequently were more likely to succeed in sex therapy (when success was measured by the Sexual Interaction Inventory summary Total Disagreement Scale post-therapy) than females who felt that they had a better knowledge of their partner's sexual preferences and who masturbated more frequently.

Prediction of success in sex therapy: self monitoring measure. As the Sexual Interaction Inventory is a questionnaire measure, stepwise regression and stepwise discriminant analyses were performed on self-monitoring data as well. The predicted variable in these analyses was improvement by females pre to post-therapy on the success:experience ratio. The success:experience ratio, which has been found by other investigators to discriminate successfully from unsuccessfully treated patients (e.g., Auerbach and Kilmann, 1977), is the number of orgasms experienced divided by the number of sexual encounters [for the purposes of the present study, both Couple Sexual (Non-Coital) Activities as well as Intercourse were considered sexual encounters]. The pre-therapy success:experience ratio is based, as are all other pre-therapy self-monitoring scores, on weeks 2, 3, and 4 of the therapy program while the post-therapy ratio is based on weeks 11, 12, and 13 of the program. In both analyses, all female subjects' pre-therapy scores on all questionnaire measures employed in the study were used: the therapeutic condition variable was again excluded from the analyses.

Table 17

Summary of Stepwise Discriminant Analysis:
Sexual Interaction Inventory Post-therapy Total Disagreement Scale

Step	Variables Entered	Wilks Lambda
1	Knowledge of Partner's Sexual Preferences (by Self) (Pre-therapy)	.551**
2	Masturbation Frequency (Pre-therapy)	.291**

** $p < .01$

Table 18

Group Means for Predictor and Predicted
(Sexual Interaction Inventory Total Disagreement Scale) Variables

VARIABLES	GROUP	
	Successes (n=11)	Failures (n=12)
Predictor Variables		
Knowledge of Partner's Sexual Preferences (by Self) (Pre-therapy) [1]	0.73	1.52
Masturbation Frequency/month (Pre-therapy)	1.78	4.40
Predicted Variable		
Sexual Interaction Inventory Total Disagreement Scale (Post-therapy) [2]	57.64	113.00

[1] The higher the score, the greater Knowledge of Partner's Sexual Preferences.

2 The overall mean on this measure is slightly different from that reported elsewhere due to differences in the ns used in the analyses.

In the stepwise regression analysis, none of the variables were found to predict, at the .05 level or better, improvement in success:experience ratio. The stepwise discriminant analysis was conducted to assess whether females' pre-therapy scores could distinguish between the 8 "successful" females whose post-therapy minus pre-therapy success:experience ratio scores were greater than 0 from the 15 "unsuccessful" females whose post-therapy minus pre-therapy ratio scores were 0 or less. Because of the sample size, only the two best discriminating variables were used in the analysis. Table 19 shows that when predicted group membership was compared to actual group membership, it was found that 17 of the 23 females (i.e., 74%) were correctly classified on the basis of information from the two variables used [Wilks= .5819 (equivalent F (2/11)= 3.95) $p < .05$]. That is, the stepwise discriminant analysis demonstrated that females' pre-therapy scores on two measures were able to predict, with 74% accuracy, those who improved (Successes) or did not improve (Failures) post-therapy. The two measures that separated the groups, in descending order, are presented in Table 20; these were pre-therapy scores on: Enjoyment of Receiving Non-Genital Caressing and % Orgasm with Partner in the Past. Means for these predictor variables and for the predicted variable (pre-therapy to post-therapy change on success:experience ratio) for the Success and Failure groups are presented in Table 21. Thus, the stepwise discriminant analysis results show that females who enjoyed receiving non-genital caressing pre-therapy and whose % orgasm with their partner in the past was higher were more likely to succeed on this measure of the outcome of sex therapy than females who did not enjoy non-genital caressing very much and whose past % orgasm with their partner was lower. (The demographic characteristics and the sexual repertoire of females who were "successes" and "failures" on this measure may be found in Tables 1 and 2, respectively; subjects 1 to 8 were "successes" while subjects 9 to 23 were "failures").

Table 19

Comparison of Actual Group Membership with Predicted Group Membership: Improvement Pre to Post Therapy on Success:Experience Ratio[1]

Actual Group[2]	n	Predicted Group	
		Successes	Failures
Successes	8	5	3
Failures	15	3	12

[1] The Success:Experience ratio is a derived score based on self-monitoring data. It is the ratio of number of orgasms divided by number of sexual encounters.

[2] Females whose post-therapy success:experience ratio was greater than their pre-therapy ratio were considered Successes; those whose post-therapy ratio was equal to or lesser than their pre-therapy ratio were considered Failures.

Table 20

Summary of Stepwise Discriminant Analysis:
Improvement Pre to Post Therapy on Success:Experience Ratio[1]

Step	Variables Entered	Wilks Lambda
1	Enjoyment of Non-Genital Caressing (Receiving) (Pre-therapy)	.746†
2	% Orgasm with Partner in the Past	.582†

[1] The Success:Experience Ratio is a derived score based on self-monitoring data. It is the ratio of number of orgasms divided by number of sexual encounters.

† $p < .10$

Table 21

Group Means for Predictor and Predicted Variables
(Improvement Pre to Post-Therapy on Success:Experience Ratio)

Variables	Group[3] Successes (n=8)	Failures (n=15)
Predictor Variables		
Enjoyment of Receiving Non-Genital Caressing (Pre-therapy)[1]	6.50	4.38
% Orgasm with Partner in the Past	35%	25%
Predicted Variable		
Success:Experience Ratio[2]	+ 0.23	- 0.03

[1] The higher the score, the greater the enjoyment of receiving non-genital caressing pre-therapy.

[2] The Success:Experience ratio is a derived score based on self-monitoring data. It is the ratio of number of orgasms divided by number of sexual encounters.

[3] Females whose post-therapy success:experience ratio was greater than their pre-therapy ratio were considered Successes; those whose post-therapy ratio was equal to or lesser than their pre-therapy ratio were considered Failures.

DISCUSSION

Sample Characteristics

The sample of secondary non-orgasmic women selected for the present study was characterized by two clinically important features. One was the longstanding nature of the problem, in most cases coinciding with the duration of the couples' relationship. The second was the variability in pre-treatment sexual repertoire and the frequency with which the women had experienced orgasm. Pre-treatment masturbation rates varied from zero to seven times per month. The frequency with which the women engaged in manual and oral genital stimulation with a partner and intercourse was equally variable. Prior to the therapy program, 10 of the women were not orgasmic with any type of sexual stimulation provided by their partners. This included four subjects who masturbated very rarely or not at all and six for whom masturbation represented a stable and satisfying aspect of their sexual repertoire. Sample characteristics suggest that the secondary non-orgasmic classification contains at least two subcategories: women who have never effectively learned the orgasmic response (i.e., those who had only experienced orgasm once or twice in their lives, in a random fashion), and those who have not transferred the orgasmic response from the solitary to the interpersonal setting. This formulation would imply a different treatment focus for each of the two subcategories in the secondary non-orgasmic syndrome, and underlines the importance of a detailed problem assessment, using a comprehensive classificatory scheme, such as that developed by Schover (1980), even within a homogeneous problem category.

Marital Variables

It has been found in previous studies (Brender et al., 1982; Libman et al., 1980) that scores on marital happiness measures for sexually dysfunctional

couples were slightly but significantly lower than those for well-adjusted couples. Therefore, although one of the subject selection criteria in the present study was marital stability (and subjects' pre-treatment scores reflected that this criterion had been met) there might still have been the possibility for further improvement in the marital area. Examination of the findings with respect to therapeutic effects on marital variables, however, revealed that both spouses were initially happy with the relationship in general, and there was no change in their overall marital happiness after the treatment program. There were also no differences observed among treatment conditions. This indicates that therapeutic effects were specific to the sexual problem, and the program did not produce either positive or negative changes in the non-sexual relationship sphere.

Personality Variables

Sexually dysfunctional couples have been found to be somewhat higher in emotionality than well adjusted couples, although still within the normal range on this measure (Libman et al., 1980). Subjects in the present investigation were selected for emotional stability (and, as with their marital adjustment , their scores on the personality measures reflected adequate personality functioning). With respect to the personality variables investigated, there was no change after the therapy program. Couples in all treatment conditions were initially emotionally well adjusted, with normal self-esteem, and no change either in the direction of improvement or deterioration occurred after therapy. This finding suggests, once again, that the sex therapy program has addressed itself to the relatively circumscribed sexual domain.

Sexual Communication, Affection, Sexual Performance Related Variables

Scores on virtually all measures of variables dealing with the quality of

the sexual interaction reflected improvement after the completion of the therapy program regardless of treatment condition. At the end of treatment, subjects indicated that they communicated more effectively about sexual matters, that spouses had a better knowledge and understanding of their partner's sexual tastes and preferences, and they were more satisfied and more comfortable with their style of sexual communication. Most of these positive changes were maintained at three-month follow-up.

There was some indication that following therapy, the females in the Bibliotherapy condition felt their partners were less sensitive to their sexual needs than did the females in the other two treatment conditions. The males showed a similar pattern in that the Bibliotherapy males reported that their partners understood their sexual preferences less well, and they themselves were less comfortable in talking about sexual matters than was the case with the males in the Couple and Group conditions.

Wives reported being more satisfied with the affection and consideration they were receiving from their spouses after treatment. Couples reported that they engaged in non-genital forms of touching more frequently and the wives' enjoyment derived from such contact was greater (statistical significance was reached only on the pre-post questionnaire data). The frequency of non-genital caressing tended to be maintained and enjoyment of this activity by wives increased significantly at follow-up. While the scores of the male spouses showed similar changes in the direction of improvement both at post therapy and at follow-up in the affectional area, many of these did not reach significance, probably because scores initially were already high.

As measured by the pre-post questionnaire data at the end of treatment, there was a tendency for the females in the Couple therapy condition to report a higher frequency of affectional contact, and greater satisfaction in this area than did the women in the other two treatment conditions. The daily self-monitoring data, however, indicated that women in the Group condition enjoyed affectional display

more than those in the Couple condition, who, in turn, reported greater enjoyment than women in the minimal contact bibliotherapy condition.

Both females and males reported greater satisfaction with the duration of sexual encounters after therapy. Husbands reported less difficulty initiating sex, while the wives reported a significant decline in the frequency with which they engaged in sex purely for their partners' enjoyment. These positive changes were also generally maintained at follow-up.

The only difference between treatment conditions was that males in the minimal contact bibliotherapy condition were somewhat less satisfied with the duration of sexual encounters than males in the other two treatment conditions.

Global Sexual Satisfaction and Harmony

On the measure for global sexual satisfaction (an item on the Azrin Marital Happiness Scale), both husbands and wives rated their overall sexual happiness significantly higher after therapy. This improvement was maintained at follow-up. Couple sexual harmony, as measured by the summary scale of the Sexual Interaction Inventory, was significantly improved after treatment, and this was also maintained at follow-up.

On the sexual harmony measure, couples in the couple therapy condition improved more than those in the other two treatment conditions.

Specific Sexual Behaviors

When one looks at frequency and enjoyment ratings of specific sexual behaviors, some discrepancies are noted in the data derived from questionnaire items administered before and after therapy, and those derived from the daily self-monitoring records.

The pre-post questionnaire data revealed that at the end of the program, frequency, enjoyment and orgasmic experience in a range of interpersonal sexual activities all increased for the women in each of the treatment conditions.

Frequency of masturbation increased, but this was not accompanied by a higher enjoyment level, even though they experienced orgasm somewhat more frequently at follow-up. The majority of the gains were maintained at follow-up.

The males' data reflected the increased frequency with which a variety of sexual activities were engaged in. There was no indication of change in enjoyment or orgasmic experience, most likely because scores in both these areas were high before therapy began.

With respect to differences between treatment conditions, the women in the group therapy condition experienced orgasm less frequently during manual stimulation than did the women in the other two treatment conditions. With mutual manual caressing, the Couple condition was related both to more frequent orgasmic response and to higher enjoyment ratings than was the case for women in the other two experimental conditions.

The daily self-monitoring data indicated that the women masturbated less frequently at the end of the program than at the beginning. (This would conform more accurately to the sequence of the therapy program instructions). While there was no change in frequency of couple non-coital sexual activities and intercourse, enjoyment levels were higher at the end of the treatment program. The enhanced enjoyment for sexual activities observed in the females' data was reflected in the scores of their male partners as well.

At the end of therapy, differences between treatment conditions were apparent in that the women in the Couple condition were more reliably orgasmic with non-coital sexual stimulation than in the other two treatment conditions. The husbands in the Couple condition reported higher enjoyment levels with intercourse. The

Bibliotherapy women both enjoyed non-coital sexual caressing less, and experienced orgasm less often than did the women in the other two conditions. Bibliotherapy males also tended to enjoy non-coital caressing less than those in the other two conditions. Bibliotherapy and Group therapy males enjoyed intercourse less than did males in the Couple condition.

The main discrepancy between pre-post questionnaire and daily self-monitoring data was in subjects' reports of changes in frequency with which they engaged in some of the various activities. There were also some minor discrepancies in terms of pattern of differences among treatment conditions between the two modes of data collection.

Although general interpretations of the experimental data were not substantially affected by these data collection differences, they highlight the importance of multiple data collection modalities. In the present study, data was collected at intermittent time periods (i.e., questionnaires at the beginning of treatment, at the end of the therapy program, and three months after the program had ended) as well as on a daily basis (daily self-monitoring records). The type of data collected in each of these modalities included behavioral measures in the form of frequency counts of sexual/affectional acts, frequency counts of orgasmic response to specific sexual acts, and subjective satisfaction/enjoyment ratings related to these specific behaviors. In addition, although the wives were the designated "problem spouses", the same data was collected for the husbands as a measure of objective validity.

For the females in this sample, questionnaire results suggested that the biggest gain was in the area of non-coital sexual activities with their partner: the frequency with which they engaged in these activities was higher, they were enjoying their participation more, and they were experiencing orgasm significantly more often at the end of therapy as compared with prior to the

treatment program. They were also reporting increased enjoyment with intercourse, despite the fact that their experience of orgasm with this activity had not changed significantly. It is noteworthy that while enjoyment ratings for some sexual activities also were significantly higher at follow-up, orgasmic frequency was not. These findings suggest that variation in sexual enjoyment may be independent from orgasmic frequency. These may be two separable dimensions of the sexual experience which need not be closely related.

Component Analysis

An attempt was made in the present study to evaluate the separate contributions of three components of the therapy "package": Sensate Focus I and II exercises and ban on intercourse. The pattern of results was such that it was possible to evaluate these components only in some combination. The results suggested that for the females, Sensate Focus exercises, in combination with the ban on intercourse produced a significant increase in level of enjoyment of non-coital sexual caressing, which was maintained throughout the remainder of the program. The males reported enjoying non-coital sex more at the end of the therapy program than they had at the beginning. During the ban on intercourse phase, it was observed that the women verbalized feelings of relief that intercourse would not be part of their love-making sessions. Both the data and the therapists' observations suggest that the elements of temporarily avoiding a sexual interaction which is problematic (i.e., intercourse) in combination with learning techniques of non-coital sexual caressing and clear communication of preferences, results in increased enjoyment of subsequent genital touching, even when intercourse returns to the sexual repertoire.

Prognostic Factors

Two measures were selected as criteria for therapeutic success: the couples' global sexual harmony and the females' frequency of orgasmic response. When the criterion measure was sexual harmony, the predictor variables were found to be: a) the frequency with which the female had experienced orgasm with a partner in the past, (positively related to sexual harmony) and b) the degree

to which the female reported knowing her partner's sexual tastes and preferences prior to therapy,(negatively related to sexual harmony). When the sexual harmony criterion was used to discriminate therapeutic "successes" and "failures" (by means of dividing the female subjects into those who scored above or below the mean for the group,respectively), it was found that 100% of the "successes" could be correctly classified, but only 50% of the "failures". The two most powerful discriminating variables were : a) pre-treatment knowledge by the female of her partners' sexual tastes, and b) pre-treatment masturbation frequency. Higher levels of awareness of partner preferences as well as higher masturbation frequencies were both associated with the "failure" category. This somewhat surprising finding may be interpreted as: a) prior to therapy these secondary non-orgasmic females focused on their partners' pleasure, at a cost to their own sexual responsiveness, and b) these women had become strongly conditioned to solitary sexual activity and its associated stimulus conditions, making the transfer to the interpersonal context more difficult (cf. McGovern et al., 1978). This interpretation would also reinforce the suggestion derived earlier from the wide variability in pre-treatment masturbation rates, that there indeed exists two subcategories in the secondary non-orgasmic syndrome: one in which the woman must learn the orgasmic response, and the other in which she must transfer the response to the interpersonal setting. Previous studies have suggested that sex therapy has been more effective with the learning rather than the transfer of orgasmic response (cf. McGovern et al., 1978).

When the selected criterion for therapeutic outcome was the female's orgasmic experience with partner mediated sexual stimulation, "successes" could be discriminated with 63% accuracy, "failures" with 80% accuracy. With this

behavioral measure, the most powerful discriminating variables were found to be: a) level of enjoyment from receiving non-genital caressing prior to therapy, and b) frequency with which the female experienced orgasm with her partner in the past (the same variable which functioned as a predictor for the global sexual harmony criterion). Greater enjoyment of non-genital caressing in the past and higher frequency of orgasms with a partner in the past placed the woman in the "success" category.

To summarize, the woman's higher orgasmic rate with a partner in the past both predicted couple sexual harmony after treatment and discriminated successful subjects on the basis of orgasmic frequency. Greater past enjoyment of receiving non-genital caresses was also associated with "success" by the frequency of orgasm criterion. Both prior better awareness of her partner's sexual preferences and higher masturbation rates were associated with "failure" on the couple sexual harmony criterion. Findings indicate that the variables related to therapeutic outcome may differ somewhat depending on the outcome criterion selected. The present study has indicated which variables are important with respect to therapeutic outcome in secondary non-orgasmic women. It also underlines the necessity of a clear definition of outcome criteria in therapy outcome studies.

Compliance with Program

When reading and exercises, adddtional to specific therapy program instructions, were recommended, subjects in the Couple condition, both females and males, completed less of the reading and engaged in fewer of the exercises than couples in the other treatment conditions. Subjects in the Couple format may have perceived these assignments as redundant with the intensive therapist contact to which they were exposed.

Amount of reading done was related to increased experience of orgasm with

masturbation for the Bibliotherapy females only, and increased enjoyment of intercourse for Bibliotherapy males. It, surprisingly, tended to decrease the enjoyment of intercourse for males in the Group therapy condition. The additional exercises were consistently related to increased orgasmic response with masturbation in all three treatment conditions. They differentially were related to increased enjoyment for non-coital sexual activities for females in the Group condition and orgasmic response with intercourse for females in the Couple and Bibliotherapy conditions.

It would appear that actual practice of various activities (assigned additional exercises) benefited subjects more than reading educational and instructional material.

Conclusions

The present study lends support to previous findings that a cognitive-behavioral sex therapy program is clearly effective in changing a wide range of subjective satisfaction and behavioral measures. The concurrence of the husbands' and wives' data provides further strength to these findings. With regard to the three experimental treatment conditions, standard couple, group, and minimal contact bibliotherapy few differences in outcome were elicited, and these were mainly in favour of the standard couple condition.

It is worth noting that the design of this study added some innovative features to couple sex therapy which clearly enhanced its cost effectiveness. It involved a time-limited program (fourteen is a conservative number of therapy sessions in which to resolve the complex problem of secondary orgasmic dysfunction). The sex therapy program was written out in detail for the spouses, which permitted the therapist to focus on non-sexual relationship issues during the therapy sessions (in effect, a double therapy process). With respect to the minimal-contact bibliotherapy condition, the technique of

having daily record-keeping sheets mailed weekly to the therapist permitted the therapist to assess compliance with the program and to identify the problems as they occurred. The nature of the present experimental procedure was such that no intervention could be initiated when these problems were sighted. One might postulate, however, that the effectiveness of minimal contact bibliotherapy would have been enhanced significantly if telephone contact were initiated as soon as a problem with the program was noted (cf. Dodge et al, 1982; Zeiss, 1978). In the clinical setting, a therapist could then have scheduled an additional session with the couple, if necessary.

The present study underlines the clinical importance of a precise definition of the individual sexual problems within the general classification of secondary orgasmic dysfunction. One might postulate that the subcategory of women who need to learn effective stimulation techniques to elicit orgasm (i.e., those more similar to primary non-orgasmic women) may do well with the minimal contact bibliotherapy or group therapy contexts. Those women who have problems specific to the interpersonal context may need the more intensive therapist contact and the presence of both partners ,provided by the couple format.

Results of the present investigation indicated that therapeutic gains on global measures were maintained at follow-up, while improvements in some specific behavioral measures were not. Since it is not clear that couples will continue to be satisfied with the general sexual relationship if some specific aspects of the relationship have deteriorated, it would appear that periodic monitoring of the couple's status (either by telephone or short questionnaires mailed to them) during the follow-up period, would substantially enhance the effects of a behavioral sex therapy program.

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