

Methodological Issues in the Study of Sex Therapy: Effective Components in the Treatment of Secondary Orgasmic Dysfunction

Catherine S. Fichten, Eva Libman and William Brender

Three components commonly utilized in sex therapy for secondary orgasmic dysfunction (Sensate Focus I, Sensate Focus II, and ban on intercourse) were studied, with the aim of not only exploring their effects on therapy outcome but also, in part, of sensitizing investigators to the benefits of incorporating component analyses within larger investigations of therapy outcome. The subjects were 23 married couples with the problem of secondary orgasmic dysfunction in the wife. Subjects were administered a multicomponent therapy program over a 14-week period. Daily self-monitoring data were analyzed to assess the impact of Sensate Focus exercises and banning intercourse on both broad (e.g., enjoyment) and narrow (e.g., orgasmic response) criteria of therapeutic effectiveness. Results indicated that for females, sensate focus exercises, in combination with a ban on intercourse, led to a significant increase in level of enjoyment for subsequent noncoital sexual caressing as well as intercourse. Orgasmic responsiveness, however, was not affected. The methodological issues of broad versus narrow therapeutic effects, compliance with treatment, and cost-effective techniques for the study of sex therapy components are discussed.

Direct sexual skills training procedures based on Masters and Johnson's¹ method, where the aim is to alter immediate causes of sexual difficulties, have demonstrated therapeutic effectiveness. Experimental studies of sex therapy outcome

This research was funded as part of a larger study by le Comité de la recherche socio-économique, Ministère des Affaires Sociales (RS315S793). All authors are at Sir Mortimer B. Davis Jewish General Hospital. Catherine S. Fichten is also at Dawson College, Montreal, and Eva Libman and William Brender are also at Concordia University, Montreal. Requests for reprints should be sent to Eva Libman, Sexual Dysfunction Service, Department of Psychiatry, Sir Mortimer B. Davis-Jewish General Hospital, 3755 Côte Ste. Catherine Road, Montreal, Quebec, Canada, H3T 1E2.

Journal of Sex & Marital Therapy, Vol. 9, No. 3, 1983, © Brunner/Mazel, Inc.

have generally adapted Masters and Johnson's approach, and have evolved multifaceted treatments variously labeled "directive sex therapy," "modified Masters and Johnson" or "sexual skills training."³ Treatment programs generally are designed to alter etiological factors presumed to be causing or maintaining dysfunctional sexual behavior, such as sexual ignorance, conflicts, anxiety, ineffective sexual technique and communication difficulties.³

Specific therapeutic components in sex therapy "packages" include a variety of techniques to deal with these problems. For example, to correct deficits in knowledge, information on sexual anatomy and the nature of sexual responding is provided, myths and misconceptions related to sexual functioning are clarified, and self and partner exploration is frequently recommended. To improve sexual skills, therapy programs may assign nongenital (Sensate Focus I) and genital (Sensate Focus II) caressing exercises, or directed masturbation. In order to reduce performance anxiety, relaxation training, systematic desensitization, a ban on problematic sexual acts (e.g., intercourse), erotic readings, and fantasy may form part of the therapy program. Communication skills and assertiveness training are commonly included in sex therapy packages. Occasionally, chemotherapy, in the form of tranquilizers or hormones has been used, either alone or in conjunction with the components mentioned above.

To add to this varied list, a number of specific techniques for a particular disorder may be included (e.g., squeeze technique, graded vaginal dilators, Kegel exercises, etc.). The techniques by which these therapeutic components are prescribed are wide ranging, and may include verbal directions, modeling, role-play, homework assignments, bibliotherapy, audiovisual materials, contracting, and reinforcement of progress by the therapist.

Mode of therapy delivery also varies. Directive sex therapy might be carried out in the traditional individual couple context or via group therapy or bibliotherapy.⁴ Both spouses or only one partner might be present. The timing of the therapy sessions themselves may also vary: Sessions might be "massed" or "spaced" and the program might be time limited or continue until the goals of therapy have been realized.

Demonstrations that a multicomponent treatment, such as behavioral sex therapy with its heterogeneous elements, effectively alters a range of sexual disorders is a first important step. The next step is to identify which of the therapeutic components is responsible for behavioral change.⁵ This can be accomplished only by selecting a homogeneous problem category and by defining clearly the therapeutic elements to be investigated. Questions of what specifically needs to be learned for which type of disorder, what techniques are best suited to teach these skills, and perhaps more importantly what mechanisms underly change, have received relatively little attention. Furthermore, because of the diversity of components in such treatment packages, it is difficult to determine why a treatment is effective or indeed why different investigators report differential treatment success with similar patient populations. In the interests of understanding the mechanisms underlying therapeutic change, of a better appreciation of etiological factors, and of developing more efficient and economic ways of providing treatment, it is necessary to isolate and evaluate the effective components in the multifaceted sex therapy packages.

STUDIES OF THERAPY COMPONENTS

An important underlying aspect in the study of therapy components is that of compliance with therapeutic prescriptions. Some treatment components, such as sensate focus exercises and bibliotherapy, require subjects to carry out "homework" between therapy sessions. As participation in therapy does not assure compliance with homework assignments,⁶ compliance must be assessed when the effects of therapy components are investigated.

No discussion of treatment components is complete without addressing the issues of the sequencing of components for optimal therapeutic effectiveness, the timing of the introduction of specific components, and the optimal duration of component interventions. Yet, in the sex therapy literature, there is little mention of these concerns.

The various types of sexual dysfunctions may respond to different interventions.^{7,8} As the focus of the present investigation is orgasmic dysfunction in women, only research that has attempted to evaluate the independent and additive effects of selected therapeutic components for this disorder will be reviewed.

Riley and Riley⁹ evaluated directed masturbation in the treatment of primary nonorgasmic women and concluded that this technique was more effective than sensate focus (training in communication of caressing tastes and preferences) plus supportive psychotherapy. O'Gorman¹⁰ investigated the effects of anxiety reduction on "sexual responsiveness" in a sample of "nonresponsive" women and found systematic desensitization to be effective in increasing sexual responsiveness post-therapy. 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.¹¹ Carney, Bancroft and Mathews¹² 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), than with diazepam, which theoretically reduced anxiety. Everaerd¹³ found few differences between a "modified Masters and Johnson" program and "communication treatment" in a sample of women complaining of "inadequate sexual interaction." Nemetz, Craig and Reith¹⁴ found significant improvement in sexual behavior, attitudes and anxiety in a sample of both primary and secondary nonorgasmic women after a symbolic modeling treatment procedure, as compared with a waiting list control. McMullen and Rosen,¹⁵ using similar techniques, also demonstrated improved orgasmic responsiveness in a sample of primary nonorgasmic women only.

In summary, the literature suggests that in the treatment of orgasmic dysfunction, directed masturbation training for women suffering from primary orgasmic dysfunction is more effective than sensate focus plus supportive psychotherapy,⁹ that there are few differences between "sexual skills training, systematic desensitization, and communication treatment,"^{11,12} and that symbolic modeling is superior to no intervention^{14,15} in the treatment of orgasmic dysfunction. In addition, a number of therapy outcome studies, in which components of sex therapy

were not a major focus of investigation, drew the following tentative conclusions about the effects of various therapy components: 1) desensitization might be most appropriate for women whose sexual anxiety contributes to secondary orgasmic dysfunction; 2) techniques that emphasize sexual and nonsexual communication might be more effective for secondary, as opposed to primary, nonorgasmic women; and 3) desensitization plus sexual-skills training may be more effective for primary than for secondary nonorgasmic women.^{7,16,17}

Few studies have directly investigated the effects of the components of sex therapy. Most studies have used nonhomogeneous problem samples. Since experimental controls and outcome measures in many such studies have been questionable, it is difficult to draw firm conclusions.

PRESENT INVESTIGATION

The present study is part of a larger investigation where the major focus was a comparative evaluation of three formats of behavioral sex therapy delivery in the treatment of secondary orgasmic dysfunction.¹⁸ While a study of the effects of components of sex therapy was not the major focus, the data lent themselves to such analysis. As the results of the larger investigation suggested that further study of the effects of components of sex therapy packages is needed, a component analysis study was undertaken. A study of the effects of three components (Sensate Focus I, Sensate Focus II, and ban on intercourse) was carried out with the aim not only of the exploration of their effects on therapy outcome but also, in part, of sensitizing investigators to the possibility of incorporating component analyses within studies of therapy outcome. The present study highlights some of the difficulties as well as the possible solutions for incorporating a component analysis element into larger investigations of sex therapy outcome.

METHOD

Subjects

The subjects consisted of 23 married couples with the problem of secondary orgasmic dysfunction in the wife. The definition of secondary orgasmic dysfunction proposed by McGovern, Stewart-McMullen and LoPiccolo¹⁹ was used. For inclusion in the study, women had to have experienced at least one orgasm through some mode of sexual stimulation but to have been dissatisfied because of low frequency of orgasmic response or because of the limited range of sexual stimulation required for orgasm (e.g., orgasmic with oral stimulation only or not orgasmic with intercourse). Most of the women reported having experienced orgasms less than 25% of the time with any type of interpersonal stimulation during the last six months.

Additional criteria to be met by subjects included: 1) wife aged 20-45; 2) duration of problem at least six months; 3) currently married, duration of relationship minimum one year; 4) educational level at least grade 9; and 5) both partners agreeable to therapy. Subjects were excluded on the basis of: 1) current physical illness; 2) current or recent (within one year) psychotherapy; 3) pregnancy or menopause; 4) severe marital discord; and 5) severe sexual problem in partner. Couples who did not meet the inclusion criteria were either treated

in the Jewish General Hospital Sexual Dysfunction Service or were referred elsewhere, if they so desired.

The final sample consisted of 23 couples who 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.

Therapy Program

The therapy addressed four major areas over a period of 14 weeks. All therapy topics, assignments, reading materials and record-keeping sheets were prepared in the form of coordinated male and female program packages given to all subjects at the outset of therapy. Each such package contained 14 sections, one for each week of the program. In addition, LoPiccolo and Heiman's three films²⁰ were shown all subjects. Specific readings and behavioral tasks for both males and females were assigned for each of the 14 weeks. The assigned readings included three books²¹⁻²³ and selected chapters from books by the Boston Women's Health Collective,²⁴ Graber and Kline-Graber,²⁵ and Masters and Johnson.²⁶

Weeks 1-3: Information Acquisition and Self-Focus. This period included didactic information on sexual anatomy, the physiology of sexual response, and sexual myths and misconceptions related to orgasmic responding. Assigned exercises included relaxation, Kegel exercises, self-exploration and directed masturbation.

Weeks 4-9: Acquisition of Interpersonal Sexual Skills and Elimination of Performance Anxiety. This period included learning to initiate and to refuse sexual relations and to express sexual tastes and preferences. During this time, intercourse was banned and the emphasis was first on nongenital, then on genital caressing. Sensate Focus I nongenital 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.

Procedure

Couples were assigned to one of three therapy conditions: standard couple therapy ($n = 7$), group therapy ($n = 8$), and minimal contact bibliotherapy ($n = 8$). All couples participated in an orientation session in which 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.

For the minimal contact bibliotherapy couples, the orientation session also included the presentation of LoPiccolo and Heiman's three films.²⁰ 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 couples 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 male-only and female-only 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 male and female groups met in the group therapy condition. Subjects met in the same way during the three-month follow-up meeting at which time subjects' progress was discussed. 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.

All subjects completed a variety of questionnaires pretherapy, posttherapy and at three-month follow-up.¹⁶ In addition, all subjects kept detailed behavioral reports of their sexual activities on a daily basis throughout the 14-week therapy program, using the Daily Self-Monitoring Form (see Table 1); these were returned by all subjects each week. On a daily basis, subjects 1) indicated whether they engaged in a variety of sexual behaviors, 2) rated their enjoyment of each sexual experience on an 8-point scale (0-7), and 3) specified whether they reached orgasm, and, if so, with which activity.

RESULTS

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

TABLE 1
Daily Self-Monitoring Form Items

| Individual Sexual Activities | Affectional Display | Couple Sexual (Noncoital) Activities | Intercourse |
|------------------------------|--|---|---------------|
| dreams | kissing and hugging | manual stimulation (genital) giving and receiving | male on top |
| fantasies | manual caressing (nongenital) giving and receiving | oral stimulation (genital) giving and receiving | female on top |
| masturbation | oral caressing (nongenital) giving and receiving | anal activities | side to side |
| reading erotica | | | rear entry |
| seeing erotica | | | |

on the Daily Self-Monitoring Form Sexual Repertoire variables; Tukey *h.s.d.* tests were used for post hoc comparisons. As there were few differences between treatment conditions on these variables,⁴ group effects are not reported. Intercourse was banned for weeks 4–9 of the therapy program. During weeks 4–6, Sensate Focus I nongenital 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. Pre-sensate focus scores were based on the means of weeks 2, 3 and 4 while the post-sensate focus 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 design of this study does not permit analysis of the independent contributions of sensate focus exercises and of banning intercourse. It is, nevertheless, possible to evaluate the effects of Sensate Focus I and of Sensate Focus II, as the ban on intercourse was a constant. Since Sensate Focus II always followed Sensate Focus I, neither the cumulative effects of Sensate Focus I nor the effects of order of presentation can be assessed. Although it would be important to evaluate the independent contribution of each of these components, the present findings are still of considerable interest since clinical settings usually combine and sequence these interventions in a similar manner.

Results of the ANOVA comparisons and post hoc tests are presented in Table 2. Of particular interest are results during the Sensate Focus I (SFI) and Sensate Focus II (SFII) periods.

Sensate Focus I and Sensate Focus II exercises were expected to increase the frequency and enjoyment of affectional display and of couple noncoital sexual activities, respectively. As the results indicate, no such changes occurred, either for males or for females. Instead, females were found to enjoy couple noncoital sexual activities more throughout the program than they did during the pre-SFI period (this in spite of the ban on such activities during the SFI period). The results for the males on this variable also show a similar tendency, although their scores show a significant difference only at the post-SF period.

Both male and female orgasmic responsiveness were expected to increase with couple noncoital sexual activities during the SFII period. For males, this was indeed the case; for females, however, no such significant differences were found.

In spite of these negative findings, the results at the post-SF period show that the program had many beneficial effects (e.g., both males and females enjoyed couple noncoital sexual activities and females enjoyed intercourse more than at the beginning of the program).

In order to examine the effects of particular therapy components, subjects' compliance with therapeutic recommendations needs to be assessed. The present results highlight the need to assess compliance in component analysis studies. For example, during the SFI period, not only intercourse but couple noncoital sexual activities also were banned. It is interesting to note, therefore, that while the results show a decrease in these activities during the SFI period, by no means did all subjects comply with the therapeutic instructions. Similarly, while intercourse was banned during the SFII period, again, all couples did not comply.

TABLE 2
Effects of Sensate Focus Exercise on Self-Monitoring Variables

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

¹The higher the score, the greater. Enjoyment scores range from 0 to 7. 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.

²Sensate Focus I and Sensate Focus II

³Data for 21 females and 22 males is presented. The records of 2 females and 1 male were not sufficiently complete for inclusion in data analysis. (Tukey *h.s.d.* tests with an α level of .05 were used).

DISCUSSION

An attempt was made in the present study to evaluate the separate contributions of three components in a multicomponent directive sex therapy package: Sensate Focus I and II exercises and ban on intercourse. The study's design was such that it was possible to evaluate the effects of Sensate Focus I and Sensate Focus II only in combination with banning intercourse. Although the experimental design did not permit evaluation of these elements separately, ban on intercourse in conjunction with the assignment of Sensate Focus I and II exercises is compatible with usual clinical practice.

The results suggest that for the females, sensate focus exercises, in combination with the ban on intercourse produced a significant increase in level of enjoyment of noncoital sexual caressing; this elevation of enjoyment was maintained throughout the remainder of the program. The male partners also reported enjoying noncoital sex more at the end of the therapy program than they had at the beginning. Parenthetically, during the ban on intercourse phase, it was observed that many of the women verbalized feelings of relief that intercourse would not be part of their love-making sessions; therefore, 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 noncoital sexual caressing and clear communication of preferences, results in increased enjoyment of subsequent genital touching, even when intercourse returns to the sexual repertoire.

Treatment can have both narrow (e.g., increase in orgasmic responsiveness) and broad effects (e.g., increase in enjoyment of sexual activities). In the present investigation, while the narrow effect of increased orgasmic responsiveness was not obtained, the broad effect of enhanced enjoyment of sexual activities was clearly demonstrated. These results suggest that enjoyment of sexual activities should not be equated with orgasmic responsiveness.

The present findings, however, do not demonstrate the beneficial effects of Sensate Focus exercises and banning intercourse in an unequivocal manner, since subjects learned effective communication and pleasuring techniques, and since performance anxiety was diminished as well. The results would be equally consistent with a "nonspecific factors"²⁷ explanation (i.e., beneficial changes caused by an intervention are not necessarily due to the reasons postulated). Thus, the present study urges caution in the use of the success of directive sex therapy in altering sexually dysfunctional behavior as evidence in the quest to validate etiological notions about sexual dysfunction (e.g., performance anxiety, skills deficit, etc.). The present results suggest that, in the absence of further evaluation of the specific effects of various therapy components, such theorizing is not warranted.

The present findings on compliance with therapy suggest that in the evaluation of the effects of sex therapy components, compliance must be assessed. Self-monitoring data, in the manner utilized in this study, permits not only the evaluation of therapeutic effects but also the assessment of compliance with therapeutic assignments. For example, the data indicated that the women engaged in more frequent individual sexual activities during the beginning of the program, when these were prescribed, than during other testing times. Similarly,

noncoital sexual activities as well as frequency of intercourse dropped during the Sensate Focus I period, when this was expressly prohibited. Nevertheless, as compliance was not absolute, the present results underscore the need to assess compliance before assessing the effects of therapy components.

As noted in the introductory statements to the results section, the larger study was not expressly designed to investigate the effects of different components of therapy. Therefore, the present data represent only a preliminary step in this direction. A number of relatively minor modifications to our procedure would, however, permit more sophisticated analyses in future research. Since a component analysis study may, given some foresight, be easily incorporated into larger studies of therapeutic effectiveness, some recommendations for how to accomplish this follow. These are based partly on our own experience and partly on Kazdin's²⁷ excellent chapter on the evaluation of behavior therapy.

As noted above, the collection of self-monitoring data on a daily basis is useful, especially if compliance with homework assignments is an issue. Otherwise, questionnaires administered before and after the implementation of a particular component can be used. In either case, the use of multiple baselines (i.e., measures tapping both the specific dimension under investigation as well as other relevant dimensions on which no change is expected) is necessary.

One difficulty in evaluating effectiveness of specific components in a behavioral sex therapy program lies in the confounding by order effects. In usual clinical practice, both the content and the sequence of various therapeutic components are predicated on logic and clinical intuition rather than on an empirical foundation. (For example, in the present study, as in most, Sensate Focus II always followed Sensate Focus I. Consequently, when the self-monitoring data indicated improvement in enjoyment of a variety of sexual activities during the Sensate Focus II period, it was difficult to evaluate the relative contributions of Sensate Focus I and II exercises.) This problem could be resolved in other investigations by administering one constellation of components to some subjects first (e.g., techniques designed to foster interpersonal skills), and another constellation (e.g., techniques designed to enhance self-understanding) second; another group of subjects might have received these elements of the program in the reverse order. In this way, order effects would be counterbalanced, and the independent effects of each constellation of components might be determined. Since the entire therapy package would still be administered to all subjects, the original research question would not be compromised.

The amount of time spent in sex therapy on implementing various components, again, is largely a matter of intuition in clinical practice and of expediency in therapy outcome research. Should the investigator wish to determine the optimal duration of an intervention, different groups of subjects may receive the same general treatment, but the duration of various components could be varied. This strategy permits, without altering the original design, the assessment of the optimum amount of time to be spent on specific components. For example, in the present study, some subjects in each group might have spent 75% of the treatment period not engaging in intercourse, while others could have spent 50% or the "usual" amount.

Should investigators wish to evaluate the effects of a therapy component which, in their opinion, is not absolutely necessary for the integrity of the treatment

package (e.g., Kegel exercises, hand-riding, etc.), then some subjects in each experimental condition of the larger study may be administered the package plus this component, while others may receive the package without this component. Alternately, some subjects in each condition of the larger study could be administered a package consisting of only a few "key" ingredients. Other subjects could be administered additional components in order to determine whether these techniques enhance the effects.

The foregoing suggestions could easily be incorporated into existing research designs, without increasing sample size. Studies of therapy outcome could, in this way, address the issues of when and how to administer what components of treatment for how long in combination with what other therapy components in order to make improvements in what aspects of the presenting problem. The relatively minor modification to sex therapy outcome studies would permit the exploration of the practical issue of designing cost-effective treatment, the research issue of making studies of "directive sex therapy" more comparable, and the theoretical issue of understanding both the etiological factors in sexual dysfunction, as well as the mechanisms underlying therapeutic change.

REFERENCES

1. Masters WH, Johnson VE: *Human Sexual Inadequacy*. Boston, Little, Brown, 1970.
2. Wilson GT: Adult disorders. In GT Wilson, CN Franks (eds), *Contemporary Behavior Therapy*. New York: Guilford, 1982.
3. Kaplan, HS: *The New Sex Therapy*. New York: Brunner/Mazel, 1974.
4. Libman E, Fichten CS, Brender W, Burstein R, Cohen J, Binik YM: Evaluation of behavioral sex therapy: A comparison of three therapeutic formats in the treatment of secondary orgasmic dysfunction. Manuscript submitted for publication.
5. Fichten CS, Wright J: Videotape and verbal feedback in behavioral couple therapy: A review. *J Clin Psychol* 39, March 1983.
6. Shelton JJ, Levy RL: *Behavioral Assignments and Treatment Compliance: A Handbook of Clinical Strategies*. Champagne, IL, Research, 1981.
7. Kilmann P: The treatment of primary and secondary orgasmic dysfunction: A methodological review of the literature since 1970. *J Sex Marital Ther* 4:155-175, 1978.
8. Libman E, Fichten CS, Brender W: Prognostic factors and classification issues in the treatment of orgasmic dysfunction. *Personality Ind Diff*, in press.
9. Riley A, Riley E: A controlled study to evaluate directed masturbation in the management of primary orgasmic failure in women. *Brit J Psychiat* 133:406-409, 1978.
10. O'Gorman E: The treatment of frigidity: A comparative study of group and individual desensitization. *Brit J Psychiat* 132:580-584, 1978.
11. Everaerd W, Dekker J: Treatment of secondary orgasmic dysfunction: A comparison of systematic desensitization and sex therapy. *Beh Res Ther* 20:269-274, 1982.
12. Carney A, Bancroft J, Mathews A: Combination of hormonal and psychological treatment for female sexual responsiveness. *Brit J Psychiat* 132:339-346, 1978.
13. Everaerd W: Comparative studies of short term treatment methods for sexual inadequacies. In E Wheeler (ed), *Progress in Sexology*. New York, Plenum, 1977.
14. Nemetz GH, Craig KD, Reith G: Treatment of female sexual dysfunction through symbolic modeling. *J Consult Clin Psychol* 46:62-73, 1978.
15. McMullen S, Rosen RC: Self-administered masturbation training in the treatment of primary orgasmic dysfunction. *J Consult Clin Psychol* 47:818-836, 1979.
16. Jehu D: Recent developments in therapy for sexual dysfunction. *Austral Psychol* 15:19-31, 1980.
17. Marks I: Review of behavioral psychotherapy II: Sexual disorders. *Am J Psychiat* 138:750-756, 1981.
18. Libman E, Fichten CS, Brender W, Burstein R, Cohen J, Binik YM, Takefman, J: *Evalua-*

- tion of behavioral sex therapy in the treatment of secondary orgasmic dysfunction: Therapeutic formats, components of treatment and prognostic factors. Final report to Conseil Québécois de la recherche sociale (N/D RS 31S 579 3), 1982.
19. McGovern K, Stewart-McMullen R, LoPiccolo J: Secondary orgasmic dysfunction I: Analysis and strategies. In J LoPiccolo, L LoPiccolo (eds, *Handbook of Sex Therapy*, New York: Plenum, 1978.
 20. LoPiccolo L, Heiman J: *Becoming Orgasmic: A Sexual Growth Program for Women* (film). New York: Focus International.
 21. Dodson B: *Liberating Masturbation: Meditation on Self-Love*. New York, Bodysex Designs, 1974.
 22. Heiman J, LoPiccolo L, LoPiccolo J: *Becoming Orgasmic: A Sexual Growth Program for Women*. Englewood Cliffs, NJ, Prentice-Hall, 1976.
 23. Zilbergeld B: *Male Sexuality: A Guide to Sexual Fulfillment*. Boston, Little, Brown, 1978.
 24. Boston Women's Health Collective. *Our Bodies, Ourselves* (2nd ed). New York, Simon & Schuster, 1976.
 25. Graber B, Kline-Graber G: *Woman's Orgasm: A Guide to Sexual Satisfaction*. New York, Bobbs-Merrill, 1975.
 26. Masters WH, Johnson VE: *The Pleasure Bond*. New York, Little, Brown, 1970.
 27. Kazdin AE.: Methodological strategies in behavior therapy research. In GT Wilson, CM Franks (eds), *Contemporary Behavior Therapy*. New York, Guilford, 1982.