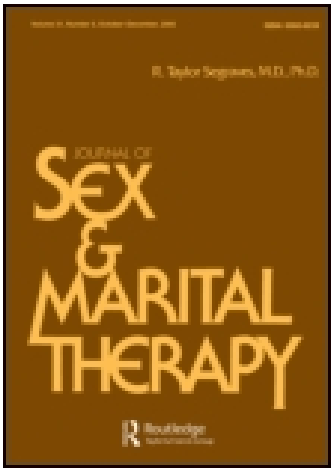

Journal of Sex & Marital Therapy
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/usmt20

Effects of a New Functional-Sexological Treatment for Premature Ejaculation

François de Carufel [a] & Gilles Trudel Ph.D. [a]
[a] Department of Psychology , Université du Québec à Montréal , Montréal, Québec, Canada
Published online: 22 May 2009.

Journal of Sex & Marital Therapy, 32:97–114, 2006

ISSN: 0092-623X print
DOI: 10.1080/00926230500442292

Routledge
Taylor & Francis Group

Effects of a New Functional-Sexological Treatment for Premature Ejaculation

FRANÇOIS DE CARUFEL and GILLES TRUDEL
Department of Psychology, Université du Québec à Montréal, Montréal, Québec, Canada

Premature ejaculation is the most-prevalent sexual problem in men. Various treatments have been developed to increase control over the moment of ejaculation, with two of the most frequent techniques used in behavior therapy being the squeeze method developed by Masters and Johnson (1970) and the "stop-and-start" technique described by Semans (1956). These treatments are effective and improve matters in most cases. However, couples can be averse to using them, with some women reluctant to squeeze their partner's penis and some couples unwilling to interrupt sexual interaction once initiated. Under a new functional-sexological treatment intended to improve control over the moment of ejaculation, men learn how to control their arousal without having to interrupt sexual activity. In this study, we compared three groups of couples in which the man suffered from premature ejaculation. One followed the new functional-sexological treatment, another followed a behavioral treatment—including the squeeze and stop-and-start techniques—and a control group was placed on a waiting list. We used several questionnaires to assess the effects of the various treatments. Moreover, subjects provided an objective measure of duration of intercourse from penetration to ejaculation. These measures were taken pre- and posttreatment and at three-month follow-up. We ran analyses of variance to assess the effects of the treatments. Results indicate that the new treatment is very effective. We observed significant improvements in duration of intercourse, sexual satisfaction, and sexual functioning. The subjects in the behavioral treatment group

Address correspondence to François de Carufel, Institut d'Études de la Famille et de la Sexualité, Université Catholique de Louvain, 10 Place Cardinal Mercier, 1348 Louvain-la-Neuve, Belgium. E-mail: francois.decarufel@iepr.ucl.ac.be, or Dr. Gilles Trudel, Ph.D., Département de psychologie, Université du Québec à Montréal, Case postale 8888, Succursale Centre Ville, Montréal, Québec, Canada, H3C 3P8. E-mail: trudel.gilles@uqam.ca

obtained similar results. Furthermore, subjects from both groups were satisfied with their respective treatment.

Premature ejaculation is the most-common sexual dysfunction in men. Results obtained with conventional treatments (DeAmicis, Goldberg, LoPiccolo, Friedman, & Davies, 1985; Hawton, Catalan, Martin, & Fagg, 1986; Kaplan, 1989; Masters & Johnson, 1970; McCarthy, 1989; Metz & Pryor, 2000) and with neurotransmitters (Eaton, 1973; Goodman, 1980; Porto, 1981; Segraves, Saran, Segraves, & Maguire, 1993; Metz, Pryor, Nesvacil, Abuzzahah, & Koznar, 1997) have been excellent. Semans (1956) mentioned that 100% of his patients using the "stop-and-start" technique succeeded in controlling the moment of ejaculation. Masters and Johnson (1970) reported that after going through a two-week program, 97.8% of their clients reversed their basic symptomatology. Munjack and Crocker (1986), Assalian (1988, 1994), Segraves et al. (1993), and Metz et al. (1997) stated that various medications, including antidepressants, neuroleptics, and anxiolitics, had a beneficial effect on delaying premature ejaculation as well as on other related aspects, such as quality of ejaculation, libido, erection, control over moment of ejaculation, and sexual satisfaction.

Unfortunately, one consequence of these results has been a decline in scientific research on premature ejaculation. Although they make it possible to prolong intercourse, conventional treatments present major drawbacks.

1. Many patients perceive the procedures used to control the moment of ejaculation, such as the squeeze method or the stop-and-start technique, as mechanical.
2. These techniques involve interrupting sexual activity.
3. These techniques are not geared toward developing eroticism in men and within couples.
4. These techniques focus on physiological processes and neglect the psychological dimensions of intercourse, such as affective communication and sexual pleasure.
5. The side effects of medication (erectile disorder, retrograde ejaculation, nausea, dizziness, diarrhea) can act as a deterrent to their use. Also, most of the time, premature ejaculation returns once the treatment is stopped (Assalian, 1988; Segraves et al., 1993).

To overcome these limitations, we developed a new innovative treatment according to the principles of the sexocorporal approach proposed by Desjardins (1986) and de Carufel (1990). Our treatment has been tested in clinical settings, with very good results. It is based on the modulation of sexual excitement through simple techniques. For example, men are instructed to move their body differently by focusing on the temporal, spatial, and energetic dimensions of their movements, to use their muscles in another way

(e.g., relax the buttocks), to vary the speed of sexual activity before and during intercourse, to breathe from the diaphragm, and to use positions that require less muscular tension. Treatment also includes education regarding sensuality and information about the sexual responses of men and women. A detailed description of this functional-sexological approach can be found in the self help book *Confidential File 101* (Carr & Sutter, 2001), which takes the form of a novel telling the story of a premature ejaculator. The efficacy of reading a description of this treatment presented as a piece of fiction, without actually seeing a therapist (i.e., bibliotherapy), was demonstrated in a study by De Sutter, Reynart, VanBroeck, and de Carufel (2002).

The purpose of this study was to compare the efficacy of this new functional-sexological treatment for premature ejaculation with that of a behavioral treatment composed essentially of the squeeze and the stop and-start techniques. We also compared the two treatments also were against a waiting-list condition.

METHOD

Subjects

Thirty-six couples participated in the research. The couples responded to an advertisement placed in a local newspaper calling for subjects to take part in a study of premature ejaculation in return for free treatment. Over the course of a telephone interview and later a face-to-face interview, we verified whether the subjects met the following selection criteria: (a) the male ejaculated less than 2 min into intercourse; (b) the relationship was ongoing for at least 1 year; (c) participants agreed to take part in weekly meetings together as a couple or (d) participants agreed to a 12-week waiting period, followed by a marital intervention for the treatment of premature ejaculation; and (e) participants presented with no major mental or physiological health problems.

Procedure

The couples were distributed evenly into two treatment groups at random. In each group, 9 of the 18 couples were randomly selected to constitute a three-month waiting-list control group before undergoing their respective therapies.

The sociodemographic characteristics of the subjects in the two treatment groups are presented in Table 1. *T*-tests yielded no statistically significant differences between the two groups regarding age, years of schooling, couple's average income, and number of years living together. We also ran analyses of variance (ANOVAs) on the two treatment groups (behavioral and functional-sexological) and on the waiting-list control group. Results showed no significant differences across the three groups regarding age, years of schooling, couple's average income, and number of years living together.

TABLE 1. Sociodemographic Characteristics of Subjects by Treatment Group

	Behavioral		Functional-sexological	
	M	*SD*	*M*	*SD*
Age (years)	33.4	5.9	35.6	4.9
Years of schooling	13.6	2.4	13.6	2.1
Couple's income	$59,418	$22,228	$55,655	$18,305
Number of years living together	9.7	5.7	12.1	5.8

Subjects in the two treatment groups were measured pretreatment, posttreatment, and at 3-month follow-up. The control group was also measured at the start of the waiting period.

DESCRIPTION OF TREATMENT

Premises and Rationale of Treatment

The functional-sexological treatment is based on the following premises and rationale.

1. Ejaculation is a reflex, and as such, cannot be controlled voluntarily (neither the emission reflex nor the expulsion reflex).
2. The reflex of ejaculation is triggered when sexual excitement reaches a sufficient level of intensity.
3. The reflex of ejaculation does not occur when sexual excitement is kept below the level that causes ejaculation.
4. The evolution/course of sexual excitement can be controlled voluntarily.
5. Consequently, given that the ejaculatory reflex as such cannot be controlled but that what provokes it—sexual excitement—can, we decided to design a treatment that took these facts into account.

In order to operationalize this rationale and to develop helpful strategies to postpone ejaculation and derive greater pleasure from sex, we divided the male sexual excitement curve as follows (Figure 1).

The ejaculation zone covers two phases: The emission phase (4a), whose beginning corresponds to ejaculatory inevitability or the point of no return, and the expulsion phase (4b). These are two reflex phases that, once triggered, cannot be stopped or controlled. Consequently, because there is no preventing anything then, it is suggested to men that they simply enjoy the moment rather than be upset or frustrated.

The ejaculatory imminence zone (3) precedes the ejaculation zone very closely. At that stage, a very slight elevation in excitement caused by a small increase in stimulation is sufficient to cause ejaculation. In a sense it is a

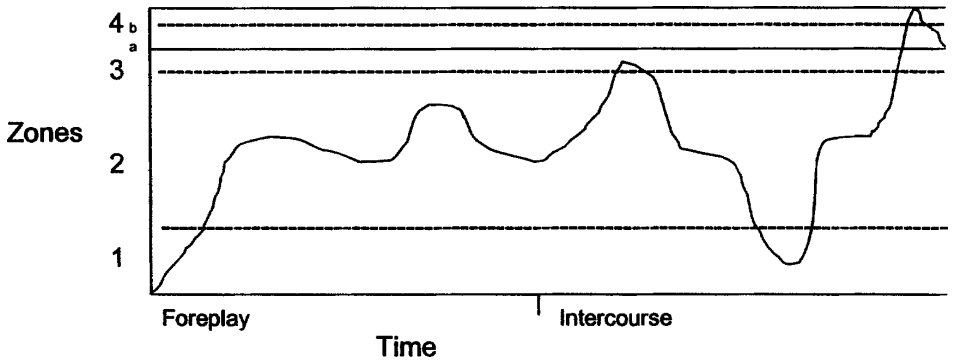

FIGURE 1. Zones of the male sexual excitement curve and an example of a sexual excitement curve: (1) Erection appearance/disappearance zone; (2) Sexual excitement modulation zone; (3) Ejaculatory imminence zone; (4) Ejaculation zone (a: emission reflex; b: expulsion reflex).

danger zone for couples who want to prolong intercourse, because, at this point, does not take much to trigger the reflex of discharge. Fortunately, men experience specific physical sensations that tell them that they have reached the ejaculatory imminence zone. These sensations can serve as cues to help men adjust themselves. Because it can be difficult to navigate at this level of excitement, especially when there is little mastery of technique, it is preferable for premature ejaculators to stay away from this zone.

The erection appearance/disappearance zone (1) corresponds to the moments when penile vasocongestion begins and grows or recedes and dies out. In this zone, the erection is more or less firm and provides limited support for either men or women to enjoy sex.

The sexual excitement modulation zone (2) is the best area to control sexual excitement because it is far enough from the ejaculation zone. It is also an excellent place to enjoy sex because erection is established and, as ejaculation is a good distance away, it allows for sexual experimentation and variety, pleasure and desire, excitement and discovery.

Under the functional-sexological treatment, couples are taught to identify the body signals that indicate the various levels of male sexual excitement and to act accordingly. The critical zones are the sexual excitement modulation zone and the ejaculatory imminence zone. The signals of the sexual excitement modulation zone, denoting that men are becoming more aroused and therefore closer to ejaculation, include any or all of the following: intensification of muscular tension, acceleration and retention of breath, acceleration of pelvic thrust, greater focalization on sexual stimulation, increase in sexual sensations, and heightening of pleasure. The greater these become, the nearer the man is to ejaculation. The bodily reactions of the ejaculatory imminence zone consist, among others, of a nearing of the testes to the body, a hardening/stiffening of the penis, shivers along the penis, the

impression that the head of the penis will explode, and other idiosyncratic sensations that each man must identify for himself.

After couples have learned about the various zones of the male sexual excitement curve, they are taught the cognitive processes, skills, information, strategies, and attitudes necessary to control male sexual arousal.

Goals of Treatment

The first goal of the treatment is for the couple to keep the man's sexual excitement at a level of intensity below that which sets off ejaculation. This is done by modulating sexual excitement, which is accomplished by monitoring sexual stimulation as well as managing breathing and the muscular tension deriving from sexual activity.

Sexual excitement stems from internal and external stimulation that the individual accepts, enjoys, and considers erotic. By monitoring the quantity of physical sexual stimulation that they receive, men develop control over the intensity of their sexual excitement and keep a good distance from the point of no return (ejaculatory inevitability). This is realized by men being aware of the level of their sexual excitement and by diminishing physical sexual stimulation when necessary. To diminish physical sexual stimulation, it is suggested that they slow down or stop their pelvic movement, caressing, kissing, touching, and so forth. Decreasing cognitive sexual stimulation (think about something else) is not recommended for two reasons. First, it is not pleasant. Second, if the mind is busy with something else, it diminishes the ability to assess level of sexual excitement and to apply control techniques.

Sexual excitement is characterized by specific reactions, including penile erection, vaginal lubrication, increased heart beat, rising up of testes, swelling of breasts, appearance of sexual redness, heightening of muscular tension (myotonia), accelerated breathing, raising of blood pressure and so forth. In the field of sex therapy, little attention is paid to the potential of muscular and respiratory reactions, which, contrary to other reactions, can be controlled voluntarily. In the case of premature ejaculation, managing these reactions helps men handle their sexual excitement. It is important to know that when muscular tension created by sexual excitement is reduced, sexual excitement declines. The two are intimately linked: Sexual excitement produces muscular tension, and a reduction in this muscular tension lowers sexual excitement. It is necessary for the muscular tension generated by sexual excitement to build up for the reflex of ejaculation to be triggered. In fact, it is almost impossible to ejaculate when the body is completely relaxed.

The same holds for breathing. Sexual excitement accelerates breathing and renders it more thoracic; breathing more slowly and more abdominally lowers sexual excitement. Moreover, muscular tension used to hold a position or to perform any movement (like the pelvic movement) and muscular tension provoked by anxiety add up to muscular tension induced by sexual

excitement. This compounded tension can make it easier for ejaculation to occur. We took this into account when we created the treatment. One of the main goals of the skills taught is to manage the muscular tension derived from various sources during sex. Managing muscular tension does not mean relaxing completely. Deep relaxation or a deep massage makes muscular tension disappear completely, and when muscular tension fades, with it go sexual desire, pleasure, and excitement. Muscular tension is necessary for these to occur, because they are like any other emotion. For example, it is not possible to laugh without contracting the abdominal, thoracic, and zygomatic muscles. To help manage their muscular tension, people are taught how to breathe abdominally using their diaphragm. They learn how to move their pelvis and adopt sexual positions using a minimum of muscular tension. They also acquire cognitive strategies to deal with the fear of not pleasing their partner.

The second goal of the treatment is to derive more pleasure from sex during intercourse. People are encouraged to focus on and relish sexual, affectionate, and relational stimuli, which can be a source of pleasure and enjoyment. It is suggested that they pay attention to a variety of stimuli and appreciate what they can perceive in their sexual encounters with their mate. By doing so, they can broaden their erotic repertoire and enjoy sex much more without needing to go hard and fast all the time. They learn to develop a kind of hedonism where environmental, visual, emotional, tactile, corporal (movement), and verbal stimuli are appreciated, as well as auditory, olfactory, and gustatory ones. This was the reply given to a man who expressed concern that taking a break during sex would ruin matters for his wife: "When you travel, you can stop along a lake and enjoy the scenery, watch the boats, feel the wind, enjoy some local food, or hold your partner tenderly in your arms and tell her that you love her. It is the same during sex. When you take a break, your wife can take her time and perceive your penis inside her vagina, feel womanly, or enjoy being close to the man she loves. For your part, you can enjoy the smell of her perfume, feel her skin, or admire her. The two of you can kiss, exchange words of affection, talk about sex, laugh, share a glass of port, etc. While your penis takes a rest from being stroked, this global experience encompasses emotional and sexual elements that stimulate her. So it is positive and beneficial for the two of you."

Content of Treatment

A. Skills

1. Breathe abdominally.
2. Dissociate the pelvic movement from the trunk when standing.
3. Use only the necessary muscles to perform the pelvic movement (especially avoid using the buttocks when thrusting forward).

4. Combine abdominal breathing with the pelvic movement; inhale when drawing the pelvis back, exhale when moving the pelvis forward.
5. Perform the pelvic movement in various positions, using a minimum of muscular tension: lying on the back, lying on the stomach, lying on the side, man on top (supported on knees and elbows).
6. Vary speed of pelvic movement (which influences the quantity of stimulation).
7. Vary intensity of pelvic movement (which determines the intensity of muscular tension).
8. Vary amplitude of pelvic movement (which allows sexual tension to be diffused away from the pelvic area to the whole body).
9. Identify the pubo-coxygean muscle and learn to relax it when approaching the ejaculatory imminence zone; this helps delay ejaculation.
10. Stop moving, relax every muscle, and breathe abdominally when approaching ejaculation; avoid trying to hold back the ejaculation by contracting various muscles.
11. Breathe with mouth open and jaw relaxed; this makes it possible to exhale faster, reduce pressure in the rib cage, and decrease muscular tension.
12. Spread legs apart. Sexual excitement tends to bring the legs together. Reversing this reaction helps the man stay away from the point of no return.
13. Keep eyes opened; this allows the body to be less curled up, less ready to ejaculate.
14. Experiment with various positions and analyze the effects that they produce on level of muscular tension, breathing, and ability to perform the pelvic movement.
15. Women do the same exercises as the men but with a different optic. Breathing abdominally helps them to perceive their internal sexual organs. Moving the pelvis contributes to increasing their sexual sensations and to augment their muscular tension, which in turn play a part in heightening their sexual excitement. Moreover, because this movement provides sexual excitement when performed slowly, providing pressure from the penis against the vaginal wall, it has the advantage of diminishing the stimulation that the man receives. Whereas the penis reacts much more to friction than to pressure, the opposite is true for the vagina. Consequently, a slow anteversion and retroversion pelvic motion by the woman will increase her sexual stimulation by augmenting the pressure against the vaginal wall without providing much friction to her partner's penis.

B. Information

1. Ejaculation cannot be controlled.

2. Excitement can be controlled.
3. In order to enjoy and prolong intercourse, it is crucial to know the zones of the male sexual excitement curve and to identify the key body cues that indicate the levels of sexual excitement in each zone.
   a) *Erection appearance/disappearance zone*
      – The perineal, abdominal, and intercostal muscles contract involuntarily
      – Breathing becomes more thoracic
   b) *Sexual excitement modulation zone*
      The signals denoting that men are becoming more aroused and, therefore, closer to ejaculation include any or all of the following:
      – Intensification of muscular tension (abdominal, intercostal, gluteal, and perineal musculature; long muscles of the legs and arms);
      – Acceleration and retention of breath;
      – Accelaration of pelvic thrust;
      – Greater focalization on sexual stimulation;
      – Increase in sexual sensations;
      – Heightening of pleasure.

      The greater these signals are, the nearer the man is to ejaculation.
   c) *Ejaculatory imminence zone*
      – Hardening/stiffening of the penis
      – Shivers along the penis
      – The impression that the head of the penis will explode
      – Other idiosyncratic sensations that each man must identify for himself
   d) *Ejaculation zone*
      – Emission reflex (vasa efferentia, epididymis, vas deferens, seminal vesicles, and prostate contractions resulting in the subjective experience of "feeling the ejaculation coming")
      – Expulsion reflex (propulsion of seminal plasma through the urethral meatus)
4. Sexual stimulation causes sexual excitement. It is mandatory to apply strategies to monitor the quantity of sexual stimulation in order to keep sexual excitement within the modulation zone. These strategies include initiating intercourse at average levels of excitement, making pauses, enjoying moderate levels of pleasure instead of continually looking for intense ones, and providing woman with a variety of stimuli instead of trying to please her by going hard or fast all the time).
5. Sexual excitement generates healthy muscular tension. This tension is necessary for ejaculation to occur. By managing this muscular tension with the physical skills described in the previous section, a man can

keep his sexual excitement below the level of sexual excitement that triggers ejaculation.

6. Sexual excitement makes breathing more thoracic and produces an elevation of respiratory rates. Reversing these reactions by breathing abdominally and slowly reduces muscular tension. This reduction of muscular tension allows to decrease sexual excitement and consequently helps to stay away from the level of sexual excitement that sets off ejaculation.
7. It is important to avoid thinking about other things or to be distracted from sexual stimulation. It is preferable to keep track of one's level of sexual excitement and to apply techniques in order to properly modulate it. Also, as it is no fun for either partner when distraction occurs, it is recommended to focus on one's partner and on sexual stimuli during sex.
8. "The trip is as interesting as the destination." This statement stresses the relevance of enjoying not only the acme of ejaculation but also the less intense sensations related to sexual excitement so as to stay in the modulation zone
9. There is no reason to be afraid of the momentary decrease in erection that can occur when experiencing a less intense form of stimulation and pleasure (in the low phase of the modulation process). Techniques to regain erection easily are also covered.
10. As the man is the one who knows best the level of excitement he is at, it is his responsibility to determine the quantity of stimulation he can receive at any moment. The couple must adapt to this reality.
11. It is better to approach intercourse at a moderate rather that a high level of sexual arousal in order to be able to manage the rush of excitement that is produced by the intromission of the penis in the vagina and the first thrusts.
12. Applying the techniques to manage sexual excitement (breathing abdominally and managing muscular tension) helps to fight anxiety related to the idea of ejaculating too fast. As a result, it contributes to decreasing the sympathetic, emotional and muscular arousal that accompanies anxiety and that could precipitate ejaculation.
13. Increased sexual excitement reduces awareness of nonpleasurable sexual matters. Therefore, it is better to keep pleasure at a moderate intensity (in the modulation zone) to be able to perceive levels of sexual excitement and to apply control techniques.

RESULTS

Objective Measure of Duration of Intercourse

The female partner in the couple measured duration of intercourse using a stopwatch. It was to be started when the man began intercourse and stopped

TABLE 2. Change over Time in Objective Measure of Duration of Intercourse from Penetration to Ejaculation by Group (in Seconds)

	Prewaiting list		Pretreatment		Posttreatment		Follow-up	
Group	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Behavioral			56.8	43.9	472.0	226.0	490.9	324.4
Functional-sexological			42.5	29.9	467.9	224.6	412.8	276.9
Waiting list	63.0	49.4	60.0	41.1				

after the woman was told by her partner that he had completed ejaculation. This was done 3 times at pretreatment, posttreatment, and follow-up. Mean duration of intercourse at pretreatment was 56.7 s ($SD = 43.9$) for the behavioral group and 42.5 s ($SD = 29.9$) for the functional-sexological group (Table 2). At posttreatment, the duration was 472 s (7 min, 52 s); ($SD = 226$) for the former and 468 seconds (7 min, 48 s); ($SD = 224$) for the latter. The results were maintained at follow-up (ANOVA) (2×3) for repeated measures revealed a time effect ($F = 64.30$, $p < .01$).

Scheffé's test showed that there was a significant change between pretreatment and posttreatment ($F = 51.70$, $p < .05$) and between pretreatment and follow-up ($F = 46.56$, $p < .05$). For the waiting-list control group, changes were nonsignificant.

Subjective Perception of Duration of Intercourse

We explored subjective perception of duration of intercourse (Table 3) through one question on a continuum ranging from 1 (less than 1 min) to 9 (more than 30 min). Results indicated that subjective perception of duration of intercourse was generally in line with its objective measure. In general, the subjects perceived intercourse to last less than 1 min before treatment and a little more than 7 min after treatment. ANOVA ($2 \times 2 \times 3$) for repeated measures of the subjective assessment of duration of intercourse by men and women in the various groups indicated only the presence of a significant time effect ($F = 106.90$, $p < .01$). Localization of the time effect by way of Scheffé's test showed a significant increase in duration of intercourse for the two experimental groups between pretreatment and posttreatment ($F = 88.54$, $p < .05$) and between pretreatment and follow-up ($F = 76.26$, $p < .05$). No significant change was observed for the waiting-list control group.

Results regarding perceived duration of intercourse tended to indicate that the effects of the two treatments were equivalent and that the subjects in the two experimental groups posted better results than did the waiting-list controls. Indeed, we noted no significant changes was over the waiting period. However, we observed a time effect ($p < .0001$) in the subjects of the two experimental groups.

TABLE 3. Change over Time in Subjective Perception of Duration of Intercourse by Group (Scale of 1 to 9)

	Prewaiting list		Pretreatment		Posttreatment		Follow-up	
Group	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Women								
Behavioral			1.56	0.73	4.63	1.54	4.44	1.50
Functional-sexological			1.33	0.59	4.47	1.58	4.31	1.56
Waiting list	1.53	0.62	1.59	0.80				
Men								
Behavioral			1.44	0.63	4.38	1.46	3.88	1.59
Functional-sexological			1.44	0.20	4.17	1.38	4.14	1.37
Waiting list	1.18	0.39	1.65	1.27				

Sexual Satisfaction

We measured sexual satisfaction with Hudson's Index of Sexual Satisfaction (1982). The results on this instrument are presented in Table 4. A drop in scores translates into an increase in sexual satisfaction. Scores for the women in the behavioral group fell from 28.2 ($SD = 14.0$) pretreatment to 16.8 ($SD = 14.4$) posttreatment and stayed level at follow-up. Scores for the women in the functional-sexological group decreased from 26.9 ($SD = 11.9$) pretreatment to 17.3 ($SD = 11.0$) posttreatment and further still to 15.3 ($SD = 10.1$) at follow-up. ANOVA for repeated measures ($2 \times 2 \times 3$) revealed a time effect ($F = 36.82$, $p < .01$).

Sexual satisfaction scores for the men in the behavioral group declined from 31.7 ($SD = 14.4$) pretreatment to 15.9 ($SD = 13.4$) posttreatment before bouncing back to 21.0 ($SD = 13.2$) at follow-up. For the men in the

TABLE 4. Change over Time in Sexual Satisfaction by Group (Lower the Score, Higher the Satisfaction)

	Prewaiting list		Pretreatment		Posttreatment		Follow-up	
Group	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Women								
Behavioral			28.2	14.0	16.8	14.4	16.8	15.2
Functional-sexological			26.9	11.9	17.3	11.0	15.3	10.2
Waiting list	29.2	16.5	24.4	13.4				
Men								
Behavioral			31.7	14.4	15.9	13.4	21.0	13.2
Functional-sexological			25.7	12.8	18.0	11.4	15.7	10.1
Waiting list	29.1	15.4	25.5	16.2				

functional-sexological group, the scores at these times were 25.7 ($SD = 12.8$), 18.0 ($SD = 11.4$), and 15.7 ($SD = 10.1$), respectively.

ANOVA for repeated measures ($2 \times 2 \times 3$) indicated a time effect ($F = 36.82$, $p < .01$). Scheffé's tests showed that there was a significant increase in sexual satisfaction between pretreatment and posttreatment and between pretreatment and follow-up. Furthermore, the sexual satisfaction scores for the women in the control group were 29.2 before the waiting period and 25.5 after. For the men, they were 29.1 and 23.5, respectively. ANOVA (2×2) for repeated measures indicated that the passage of time had no effect on sexual satisfaction over the waiting period.

Sexual Interaction

We used the Sexual Interaction Inventory (LoPiccolo and Steger, 1974) to measure 11 individual or couple variables related to sexual satisfaction (Table 5). Most of these improved significantly for treated subjects. ANOVA (2×3) conducted on the results for the two experimental groups yielded a significant time effect on satisfaction with frequency (i.e., difference between actual frequency and desired frequency) in both men ($F = 8.70$, $p < .01$) and women ($F = 20.08$, $p < .01$). Scheffé's test indicated a significant improvement for both men and women between pretreatment and posttreatment and between pretreatment and follow-up. For the controls, a Student's *t*-test showed a significant improvement in satisfaction with frequency in men only over the waiting period ($t = 2.44$, $p < .05$).

With respect to satisfaction regarding sexual pleasure (i.e., difference between perceived pleasure and desired pleasure), ANOVA revealed a significant time effect for both men ($F = 8.56$, $p < .01$) and women ($F = 11.33$, $p < .01$). Scheffé's test showed that these time effects referred to significant improvements between pretreatment and posttreatment and between pretreatment and follow-up. The subjects experienced greater pleasure during sexual activities. *T*-tests run on the control group revealed no significant improvement over the waiting period.

However, regarding a direct measure of sexual pleasure perceived during sexual activities by each partner (i.e., response to the item: "I find this activity extremely pleasant, pleasant," and so on), no significant effect emerged for either men or women, whether treated or not.

The measure of pleasure perceived by each member of the couple (i.e., difference between pleasure perceived in partner and pleasure reported by partner) indicated a time effect in men ($F = 5.43$, $p < .01$) and in women ($F = 8.46$, $p < .01$). According to Scheffé's test, the effect was significant between pretreatment and follow-up in men and women and tended toward an improvement. We observed no significant effect for the controls over the waiting period.

TABLE 5. Results on the Sexual Interaction Inventory over Time

	Prewaiting list		Pretreatment		Posttreatment		Follow-up	
Group	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Men								
Satisfaction—frequency								
Behavioral			19.3	8.4	15.0	8.1	15.4	7.4
Functional-sexological			21.2	9.1	18.1	10.9	13.8	7.5
Waiting list	22.2	8.6	18.9	8.4				
Satisfaction—pleasure								
Behavioral			4.8	4.2	3.2	4.5	2.9	3.6
Functional-sexological			4.8	5.1	2.6	3.3	2.1	3.1
Waiting list	7.6	5.8	5.6	5.1				
Pleasure								
Behavioral			7.0	1.0	7.2	0.6	7.1	0.5
Functional-sexological			7.1	0.5	7.2	0.5	7.1	0.4
Waiting list	6.9	0.5	6.8	1.0				
Perceived pleasure								
Behavioral			20.4	9.8	16.5	7.3	15.8	6.6
Functional-sexological			18.3	7.6	15.3	5.5	13.5	8.1
Waiting list	18.1	5.9	20.3	9.5				
Perceived vs. desired pleasure								
Behavioral			16.6	14.8	16.1	12.7	15.1	11.5
Functional-sexological			19.0	12.3	13.9	10.2	10.2	8.6
Waiting list	19.9	11.0	16.0	14.1				
Women								
Satisfaction-frequency								
Behavioral			18.6	9.9	10.6	7.7	11.4	8.0
Functional-sexological			17.5	8.0	11.9	4.6	11.1	5.8
Waiting list	17.9	7.5	16.6	6.7				
Satisfaction—pleasure								
Behavioral			11.9	9.7	6.6	6.1	8.3	10.6
Functional-sexological			8.9	6.9	5.0	4.8	6.3	8.7
Waiting list	11.4	8.4	10.1	9.7				
Pleasure								
Behavioral			6.5	0.6	6.8	0.5	6.8	0.5
Functional-sexological			6.7	0.6	6.7	0.6	6.7	0.7
Waiting list	6.6	0.5	6.6	0.4				
Perceived pleasure								
Behavioral			16.4	9.9	11.9	3.8	10.3	5.1
Functional-sexological			14.8	5.3	13.4	4.2	10.9	5.4
Waiting list	15.4	5.3	16.8	9.3				
Perceived-desired pleasure								
Behavioral			9.9	6.7	5.8	5.0	6.0	6.4
Functional-sexological			8.2	7.8	6.8	6.9	4.6	6.3
Waiting list	9.9	5.8	7.8	6.4				
Couple's sexual satisfaction								
Behavioral			118.0	40.8	86.1	36.3	86.6	43.3
Functional-sexological			112.7	40.4	87.1	31.3	72.4	35.2
Waiting list	122.4	35.7	112.2	38.3				

Results on questions regarding pleasure perceived and desired by partner (i.e., difference between pleasure perceived in partner and pleasure desired by partner) indicated a time effect in men ($F = 5.15$, $p < .05$) and women ($F = 9.29$, $p < .01$). Scheffé's test showed a significant effect between

TABLE 6. Change over Time in Satisfaction with Treatment (Score Range from 8 to 32)

	Posttreatment		Follow-up	
Group	*M*	*SD*	*M*	*SD*
Women				
Behavioral	28.0	3.78	27.07	4.65
Functional-sexological	28.22	3.42	28.05	3.61
Men				
Behavioral	28.0	3.68	26.47	4.58
Functional-sexological	28.28	3.53	28.22	3.21

pretreatment and follow-up in men and between pretreatment and posttreatment and between pretreatment and follow-up in women, also tending toward an improvement. Although *t*-tests revealed no significant difference in male controls, we observed a significant improvement in female controls over the waiting period.

Finally, results concerning couple's global sexual satisfaction yielded a significant time effect ($F = 36.50$, $p < .01$). Scheffé's test showed a significant effect between pretreatment and posttreatment and between pretreatment and follow-up. Couples were globally more sexually satisfied after the treatment. *T*-tests revealed no significant time effect for controls over the waiting period.

Satisfaction with Treatment

We measured satisfaction with treatment (Table 6) with the Client Satisfaction Questionnaire (Larsen, Atkinson, Hargreaves, & Nguyen, 1979). Scores on this test varied from 8 to 32 (the higher the score, the greater the satisfaction). Women in the behavioral group posted a mean score of 28.0 ($SD = 3.8$) posttreatment and 27.1 ($SD = 4.7$) at follow-up, compared with 28.0 ($SD = 3.7$) and 26.5 ($SD = 4.6$) for the men. Women in the functional-sexological group posted mean scores of 28.2 ($SD = 3.4$) and 28.1 ($SD = 3.5$), compared with 28.3 ($SD = 3.5$) and 28.2 ($SD = 3.2$) for the men. There was no significant difference between the two groups in this regard, and subjects as a whole expressed a high degree of satisfaction with both treatments.

Other Results

We used other questionnaires to measure posttreatment changes in the sexual and marital spheres. We used one question from the Sex History Form (Schover, Friedman, Weiler, Heiman, & LoPiccolo, 1982) to assess orgasmic frequency during intercourse. ANOVA ($2 \times 2 \times 3$) revealed a gender effect ($F = 96.27$, $p < .01$), a time effect ($F = 4.74$, $p < .01$), and an interaction

($F = 4.74$, $p < .05$). Results on Scheffé's test showed a significant increase in frequency of orgasm during intercourse in women in both treatment groups between pretreatment and follow-up. Over the waiting period, ANOVA revealed only a gender effect ($F = 53.89$, $p < .05$), showing a lower frequency of orgasm during intercourse in women only.

We used the global score on the Dyadic Adjustment Scale, developed by Spanier (1976), to measure change in marital satisfaction during treatment. In general, results fell within the limits of persons presenting with no spousal distress. However, ANOVA ($2 \times 2 \times 3$) revealed a time effect ($F = 4.63$, $p < .01$). According to Scheffé's test, this effect was present in the two experimental groups between pretreatment and posttreatment and indicated an increase in marital satisfaction. ANOVA (2×2) over the waiting period demonstrated no effect related to the control condition.

These results are interesting because they indicate that a specific treatment geared exclusively to improving duration of intercourse had an impact on sexual satisfaction in general, woman's sexual functioning, and the couple's global functioning.

CONCLUSIONS

This research shows that the new functional-sexological treatment is as effective as the traditional behavioral treatment in improving the sexual life of couples when the man suffers from premature ejaculation. The new treatment increased duration of intercourse and the sexual satisfaction of both partners as much as did the behavioral treatment. Moreover, it was appreciated by both men and women as much as was the behavioral treatment. However, because it requires mastering physical skills, it may be less attractive than the more-traditional behavioral treatment to some people for whom the stop- and start-technique and the squeeze method are easier to understand and apply. Also, as Assalian (1994) pointed out, a pharmacological intervention would be indicated following a failed sex therapy and when a man faces divorce or feels suicidal on account of his sexual dysfunction. Nevertheless, the results that we obtained are of great interest because the functional-sexological treatment presents numerous advantages. First, it does not entail interrupting the course of sexual activities. Second, it fosters positive feelings and erotic exchanges during intercourse. Third, no technical intervention is required on the part of the partner in order for the man to control himself. As such, it should appeal to a good segment of the population.

This research has shown that it is possible to treat premature ejaculation successfully and satisfactorily with a functional-sexological treatment whose characteristics differ in many respects from those of traditional approaches. The functional-sexological treatment under study constitutes a new tool with

which sex therapists can help men and women improve and enjoy their sex life.

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